H E 393 A13 19174



Glass H E 3 9 3
Book , A 13
1917 4









2

RIVER AND HARBOR APPROPRIATION BILL

HEARINGS

ON

H. R. 4285

HELD BEFORE THE

303 940

COMMITTEE ON RIVERS AND HARBORS

4.3 Ing. HOUSE OF REPRESENTATIVES

SIXTY-FIFTH CONGRESS

CONSISTING OF

JOHN H. SMALL, North Carolina, Chairman,

CHARLES F. BOOHER, Missouri.
THOMAS GALLAGHER, Illinois.
THOMAS J. SCULLY, New Jersey.
WILLIAM KETTNER, California.
SAMUEL M. TAYLOR, Arkansas.
MURRAY HULBERT, New York.
H. GARLAND DUPRÉ, Louisiana.
MARTIN DIES, Texas.
OSCAR L. GRAY, Alabama.
GEORGE K. DENTON, Indiana.

HUBERT F. FISHER, Tennessee.
CHARLES A. KENNEDY, Iowa.
ROBERT M. SWITZER, Ohio.
ALLEN T. TREADWAY, Massachusetts.
JAMES A. FREAR, Wisconsin.
DOW H. DRUKKER, New Jersey.
PETER E. COSTELLO, Pennsylvania.
S. WALLACE DEMPSEY, New York.
HENRY I. EMERSON, Ohio.
HENRY Z. OSBORNE, California.

WILLIAM C. BROOKER, Clerk.

JOSEPH H. McGANN, Assistant Clerk.

MAY 1, 2, 3, AND 5, 1917



WASHINGTON GOVERNMENT PRINTING OFFICE 1917

HE393

D. of D. NOV 10 1917

RIVER AND HARBOR APPROPRIATION BILL.

Committee on Rivers and Harbors, House of Representatives, Tuesday, May 1, 1917.

The committee met at 10 o'clock a. m., Hon. John H. Small (chair-

man) presiding.

The CHAIRMAN. Gentlemen, we have with us this morning Col. Newcomer, from the office of the Chief of Engineers, and, unless the committee directs otherwise, we will take up these recommendations, made by the Secretary of War, in the order as they appear in the recommendations which have been printed.

Col. Newcomer, the Secretary of War has submitted certain recommendations to be included in a river and harbor bill at this session for maintenance and improvement. Will you kindly state upon

what basis or conditions these recommendations were made?

STATEMENT OF COL. HENRY C. NEWCOMER, OFFICE OF THE CHIEF OF ENGINEERS.

Col. Newcomer. Mr. Chairman, I will state that these recommendations originated from a recommendation made by the Chief of Engineers to the Secretary of War at a time when it appeared very doubtful whether any river and harbor legislation would be enacted this year. He felt that the situation of the general transportation service of the country was such as to require some work, not only for the more urgent commercial needs but also for certain military purposes as a matter of defense. For that reason he prepared a brief memorandum, which he took up to the Secretary of War, accompanied by a copy of the bill. He took this Senate bill as the basis for his action, and in arranging the program for the more urgent military and commercial needs we struck out the items which we felt might be omitted at this time. We do not mean, of course, that we consider those items that were stricken out unimportant or not useful, but they were simply considered as ones that might be eliminated in the process of pruning in order to get down to what might be considered as the essentials most necessary at this. time. That memorandum and the proposed schedule of items were taken by the Secretary to the President, and it was understood that they received his assent. In fact, we were convinced from what took place later that the administration was quite willing to have a bill substantially the same as the bill as it passed the House and was amended by the Senate Committee on Commerce.

Mr. Frear. At the last session?

Col. Newcomer. Yes, sir; at the last session. But further consideration led to a modification of that attitude, and a reversion to the first one of taking care of only the more urgent cases.

Mr. Treadway. As I understand it, this started with the Chief of Engineers having a brief memorandum, as you stated, and then you

supplemented that with the list contained in this bill?

Col. Newcomer. It was a brief memorandum, or simply a statement calling attention to the necessity of making some provision for these matters.

Mr. Treadway. Was that an itemized statement?

Col. Newcomer. No, sir; it was simply a brief memorandum referring to the general situation, and it was accompanied by this itemized list just as you have it here. That list contains all the items that were in the bill as it was reported to the Senate by the Senate Committee on Commerce at the last session. We have simply stricken out some of them. We have simply crossed out with a pencil the ones that we felt might be omitted in the present emergency. That list, as I said, accompanied the memorandum, and it was the one that went to the President.

Mr. Treadway. The reason I asked that question was that I saw in the press about the time of this conference—but that, of course, does not make it in any sense official—a list which was approved, as I understood it, by the Secretary of War. It was a very brief list of some important harbors of the country which were approved by the Secretary of War for appropriation at this time. Now, was that

the memorandum that you have referred to?

Col. Newcomer. I hardly think so. That was one submitted by the Secretary of War with reference to channels required by the fleet of defense, was it not?

Mr. Treadway. I think so.

Col. Newcomer. There was in last year's naval appropriation act a provision requiring the Secretary of War and the Secretary of the Navy to report to Congress as soon as possible the additional work required for harbor and channel improvements required for the operations of the fleet of defense. In response to that provision of law the matter was taken up, first by the joint board of the Army and Navy, which approved, as the basis for further action, the report which had already been made by the General Board of the Navy, in which they discussed that situation and took up certain localities which they said should receive additional improvement for the operation of the fleet of defense. That was simply submitted as an ordinary congressional document and is not especially involved in Some of the items that were in that program are not in this bill, although there are some others that are included. As a matter of fact, there is only one of those items that is really included in this bill, and that was in the bill as introduced last session in the Senate. The question as to who should take up those items for the purely naval defense was a question that we did not think should come before the department.

In other words, I mean by that that the information has been sent to Congress, and whether they will appropriate for it in the naval bill or in some other bill, we do not know, because it is not strictly speaking river and harbor improvement. For instance, for the East River, New York, the Navy Department asked for a depth of 40

feet to the navy yard, while we had proposed 35 feet. Thirty-five feet is ample for all commercial needs, but the Navy wants the greater depth and, primarily, that should be provided for from some other fund than the river and harbor fund, because the latter is intended mainly for commercial needs. We have already reported to Congress that a depth of 35 feet in the East River is desirable for commercial needs. [Attention is invited to Col. Newcomer's testimony on May 3, from which it appears that it had been the Chief of Engineer's intention to include in the bill all the items reported in Senate Document No. 3, Sixty-fifth Congress, first session, as required now for naval defense, but through misunderstanding this was not done at first. The matter was corrected by amendments to the bill proposed on May 3.]

Ir. HULBERT. Why do you say that 40 feet is more than the com-

mercial needs require in that river?

Col. Newcomer. It is because they do not need any more than that in the East River.

The CHAIRMAN. I suggest that we permit Col. Newcomer to make

his general statement before taking up the specific items.

Col. Newcomer. I might state, to supplement the outline I have already given, that this matter, of course, had to be taken up rather hurriedly, and the result does not necessarily mean that the items omitted were not advisable at this time. A final survey of the whole situation might possibly indicate otherwise. As a matter of fact, after submitting that first list, the matter was taken up with reference to a few improvements which were modified. For instance. there was put in the item for the improvement of the mouth of the Brazos River, and that was done on account of the sulphur situation. Our first information did not indicate that it was essential at this time to make any further provision for that, because we did not appreciate at that time the extent to which sulphur enters into the munitions industry. Heretofore the ore used in the manufacture of sulphuric acid had been obtained mainly from Spain, but on account of the lack of ocean freight-carrying ships they could not get pyrites from abroad, and they now are forced to use sulphur. We put in that item for the improvement of the Brazos River for that reason, because that is one of the two places where sulphur is obtained in this country. There may be other instances where more thorough information might lead to modifications, but that list represents the best judgment of the Chief of Engineers based upon the information he had at the time it was prepared.

Mr. Frear. May I inquire what is the total amount carried in this

bill?

Col. Newcomer. The total amount is, I think, \$26,897.000.

Mr. Frear. And from that has been deducted the Mississippi River item?

Col. Newcomer. No, sir; the Mississippi River item was not included in this bill.

Mr. Frear. But that has been deducted from the old bill.

Col. Newcomer. Yes, sir.

Mr. Frear. And this, also, as near as I can ascertain, deducts the amount that was carried for the Chesapeake & Delaware Canal?

Col. Newcomer. We took the Senate bill in that respect. In other words, we took the Senate provision for the condemnation, with a small appropriation to cover the expenses of condemnation.

Mr. Frear. What was the total for that in the House bill—\$1,300,000?

Col. Newcomer. It was \$1,300,000 as it passed the House.

Mr. Frear. I think we will have to have this preliminary understanding of the matter so that we may get the views of the engineers.

Col. Newcomer. I might state this, that no amount reported as required for maintenance was cut out, and the only eliminations were those new projects which we considered not of a really urgent nature, or not of such an urgent nature as would require their insertion in the bill at this time. We did that with a view of cutting down the total. Then, also, there were a few works of improvement that had already been authorized where the amounts for further continuing improvements were reduced or eliminated, because those were works that we did not consider as entering so strongly into the necessities of the case at this time. There were other works where the appropriations were continued because we felt that where the Government had embarked upon an improvement of a very extensive and costly nature, the work should not be allowed to lag. For instance, there is the work on the upper Mississippi River, where, as you know, they are having conferences with a view to developing the traffic. There is a conference to be held next Tuesday in St. Louis on that subject, which will be attended by the governors from all those States that are interested. As you know, they have built some docks at Minneapolis, and the same thing has been done at Dubuque. Louis is doing the same thing, and earnest efforts are being made to actually utilize the waterway.

Moreover, that is being done in connection with the present effort to coordinate all the transportation agencies of the country. That is being done very effectively under the direction of the railroad officials, so far as the railroads are concerned, but they have apparently paid very little attention to the waterways, and an effort is being made now to secure such coordination between the waterways and railroads as will assist in relieving the rail congestion and in improving the general transportation service. Take, for instance, the Mississippi River: That river is capable of carrying a large amount of commerce that would considerably relieve the congestion

on the north and south lines of railroad.

Mr. Frear. There is no freight line operating on the upper Mississippi River.

Col. Newcomer. Yes, sir; I think there is one.

Mr. Frear. No; that is a passenger line, and it depends upon pas-

senger traffic and excursions for its revenues.

Col. Newcomer. There is no barge line there at present. We do not look upon the boats running there now as being very useful in a large way as a freight-handling agency. Of course they handle some freight in the way of express freight, which is important. But if you will take any development of waterway traffic on a large scale you will find that it will probably have to come in the way of barge traffic, and that is just what we are trying to get at, as they have done on the Missouri River, for instance.

Mr. Frear. I would like to ask some questions touching the matter of policy in the submission of these items. I notice that in a good

many of these items you have joined quite a large number of projects—that is, projects for maintenance. Take page 2 of the bill, for illustration, and you will find in the first item about a dozen projects, whereas there were only two of them in that item in the former bill as it passed the House. Now, I am asking that for the purpose of ascertaining what is the reason for the other 10 being placed here. For instance, in this particular case, what is the purpose of using any part of this fund for Gloucester?

The CHAIRMAN. In answer to that question will you state what

was the policy adopted and the reasons for it?

Col. Newcomer. The purpose of grouping or consolidating items which are in the same general geographical location, and always grouped according to the engineer districts in which they are now included, was to get a more advantageous and economical use of the funds provided. It is obvious that in making estimates a year ahead, and generally a year and a half in advance of the time when the funds are to be supplied, we can not foresee what the needs will actually be. We have to make more or less of a guess based upon our past experience as nearly as we can make it. Now, when a fund is estimated for a particular work and is appropriated specifically for that particular work in the law, it is not applicable to the work provided for in any other fund, and therefore shifting needs, as they may develop with the passage of time, can not be met by any shifting of the funds. There is no reason at all that we can see why it would not be advantageous to have certain groups of improvements in that way, or why we should not have an emergency fund available, so that we might apply so much of it as might be necessary to the need as it develops. In the long run it will obviously require a smaller amount of funds to be set aside for a project if it is done in that way than if you specifically provide for each one.

Mr. Frear. Suppose it was the judgment of the committee that one or more of the items carried in this group of items, or in this consolidation of items, was more important than the others, or that some ought to be appropriated for and others stricken out, under this method what means could be adopted by the committee in preparing the bill? This, as I understand it, is a new proposition, except in so far as it was begun to a small extent in the last bill.

Col. Newcomer. It was not only adopted in the last bill, but it has been practiced to a certain extent for a number of years. It has proved so useful that we think it is a good policy to have it this way.

Mr. Frear. But if the committee differed from the engineers, let me inquire how could we determine what should be stricken out or should be added to? Suppose, for instance, we wanted to add to it.

Col. Newcomer. That could very readily be done.

Mr. Frear. How could we determine it?

Col. Newcomer. Simply by leaving out the names.

Mr. FREAR. But there is no statement of the amount that shall go to each project. That is left to the engineers. You will find that provision on page 27 of the bill.

Col. Newcomer. That can be done very readily in this way: In the first place, I might state that we propose to cover each item in the annual report, showing with respect to each locality the amount that

is proposed to be used there both for maintenance and for work of

improvement.

Mr. Frear. Then afterwards you have the right to make a change or to make a new allotment under this provision on page 27 of the bill?

Col. Newcomer. Yes, sir; we ask for that right in order that we

may shift the funds to meet shifting needs.

Mr. Frear. I am giving you the committee's position. The committee would simply appropriate that lump sum to the engineers to

distribute as they deem best.

Col. Newcomer. Substantially so. But to meet your other quetion, the committee can very readily control the thing down to the least detail, if they desire to do so, by simply stating for the maintenance of such a harbor so much, and you could, of course, withdraw that general provision if you think we can not be trusted with the distribution of that fund to meet the shifting needs.

Mr. Frear. If the engineers could have been trusted all these years in the past, why were they not trusted? As a matter of fact, the committee has hitherto reserved to itself the right to say how much shall be expended for the maintenance or improvement of each

one of the various projects.

Col. Newcomer. I do not think the committee has done that in the past. It has not been so insistent about questions of maintenance as it has about questions of improvements. In other words, the maintenance funds have nearly always been granted, I think, without much question, and it is only the question of how rapidly improvements shall proceed that the committee has been insistent about. You will notice that we have discriminated here as between maintenance and improvements. The maintenance fund has been put in a lump sum for all the projects, and then we have stated, "for the improvements of such a project or locality, so much." Of course, if the committee pleases or if Congress pleases, we could be limited to that amount, and the discretionary power could be withdrawn, but I do not think that it would be at all dangerous to allow it.

Mr. Kettner. The committee last year discussed this problem on several occasions, and we were generally agreed upon the proposition that we should turn over lump sums to the engineers for maintenance.

This matter was discussed on several occasions last year.

Mr. Treadway. Before the colonel leaves that question that Mr. Frear brought up in connection with the grouping system I would like to ask his interpretation of the sentence in line 18, on page 27, where it refers to these projects, both individually and in groups. The language I refer to is as follows:

In case such works or items are consolidated, and separate amounts are given to individual projects, the amount so named shall be expended upon such separate projects unless, in the discretion of the Chief of Engineers and the Secretary of War, another allotment or division should be made of the same.

What is your interpretation of that sentence, "Another allotinent or

division should be made of the same "?

Col. Newcomer. That provision is copied verbatim from the provision which accompanied the former consolidation of items, and I understand that its purpose is to permit the Engineer Department to readjust the funds where the needs show that the funds provided for

one project, for instance, is not required and it is needed for another. For instance, take the improvement of the upper Hudson River. There is a case where the improvement has been estimated to cost so much, but it looks now as though we would save quite a little sum there on that improvement. If there were some other works grouped with that the sum not required for the upper Hudson improvement could be applied where it was needed. I do not recall that such a diversion has ever been made, but it is something that might be use-

ful under certain conditions.

Mr. Treadway. Would it not practically mean that in spite of the individual appropriations for maintenance, or in spite of the groups as you have arranged them, there would still be discretionary power in the hands of the Chief of Engineers or the Secretary of War to practically lump the entire number of items and say, "We do not need it here, and therefore we will spend it there"? It does not look to me as though that places it so that you would be required to use it for items in a given group. For instance, Mr. Frear has referred to that item of \$24,000, on page 2, which is the first item in the bill; \$24,000 is estimated there for those various items, but as I interpret the language I have just read, on page 27, if you did not want to use that money on any of those items mentioned there you could expend it under the third item there on account of the various items in Connecticut?

Col. Newcomer. No, sir. This language simply means liberty of transfer or readjustment as between items in that particular consoli-

dated list, and not as between different groups.

Mr. Treadway. That is what I wanted your interpretation of. I

should construe that to mean that you could use it anywhere.

Col. Newcomer. It is confined to the group, and, of course, it is to be assumed, I think, that the department, in carrying out the will of Congress as expressed in the law, would have to carry out that intent so far as the circumstances would permit. It is only in view of changing circumstances that they would ever make any readjustment of that. This is simply to give discretion to the department to meet shifting circumstances. I think the engineer department has the reputation with you people, as a rule, of living up to the intent of the law as we understand it. We do not try to evade it, I think, in any case.

Mr. Costello. I notice that for the improvement of these various projects in the new bill there is a very material reduction from the amount that is carried in the old bill for the different projects that are grouped in the new bill. Now, I interpret that to mean that the War Department is going to expend just sufficient money to maintain the work that has already been done on these different projects to save them from deteriorating and for the purpose of maintaining them, and the idea was to enable you to have enough money allotted to take up whichever projects required your attention within the

amount of the appropriation as a whole.

Col. Newcomer. That is substantially the case, except in this respect, that reductions have not been made in the amounts required for maintenance. Those were ordinarily reduced originally as far as we felt that they could be reduced, but the reductions here are in the amounts for further improvement.

Mr. Hulbert. I would like to know where it is reduced.

Mr. Gallagher. This language reads:

Any balances remaining to the credit of the consolidated items shalls be carried to the credit of the respective aggregate amounts appropriated for the consolidated items.

That means if you have anything remaining over, then you could shift it to wherever you want to shift it for the consolidated items.

Col. Newcomer. Those balances left on hand in a group are credited to the group instead of to separate items and can be distributed

as the needs of the work require.

Mr. HULBERT. I would like to ask one other question: When Col. Newcomer appeared before the committee last year, my recollection is that he stated that that \$24,000 was estimated in order to maintain the Mystic and Malden Rivers. Now, having included about 12 other items in that paragraph on page 2, I would like to ask Col. Newcomer whether he has found that he can consistently reduce the amount which he originally expected to expend on the Mystic and Malden Rivers?

Col. Newcomer. It is not expected to reduce that at all, but it is expected that the \$24,000 will be used on the Mystic and Malden

Rivers.

Mr. Hulbert. Then, these other items are simply surplusage.

Col. Newcomeb. No, sir; because it brings those new items into a different situation. If you will look at our annual report for last year you will find that those items are carried in the annual report, but in estimating for additional funds no estimate for them was made for this year, 1918, because none was required. Now, the grouping of these items together would make available the use of this \$24,000 for any of these items as conditions may require. In other words, as a matter of fact, we might expend, and under this authority we could expend, some of that fund for other work if changing conditions should make it necessary.

Mr. Hulbert. In other words, the items included in the first paragraph substantially create a district, with the idea that the money allotted or provided for that district can be expended by you within

that district wherever it may seem essential.

Col. Newcomer. Yes, sir.

The CHAIRMAN. My recollection is that for a number of years

there have been some groups of that kind.

Col. Newcomer. Yes, sir. For instance, this provision on page 27, about which we have been speaking, is copied practically verbatim from the river and harbor act of 1912, which consolidated quite a number of items in different parts of the country. This is simply a further use of the same methods that were adopted at that time for certain localities.

Mr. Treadway. The act of 1912 specified where those consolida-

tions should be, did it not, or was it a general provision?

Cel. Newcomer. That act consolidated a number of items by arranging them in groups. It also had this general provision like the one on page 27, and in that case it was made a part of the first section, to indicate that where items were so consolidated the funds should be handled in the way described.

The Chairman. I think there were about 16 consolidations or groups in the last bill reported by the committee and as it passed the

House.

I would like to say just a word which might amplify and further explain what Col. Newcomer has stated: The grouping here only includes items of maintenance, and where there is included in a group any appropriation for improvement, it is so stated specifically, and in that case the appropriation is limited to that specific item of improvement.

Mr. Hulbert. Suppose there is a balance?

Col. Newcomer. As a general proposition, it does give discretion, undoubtedly, to the Secretary of War and the Chief of Engineers to readjust these funds if the circumstances change.

The Charman. For instance, you might complete a project with a sum less than the amount estimated or appropriated, and, if so, the surplus could be used for any specific item or items in that group where it should be necessary to use it.

Mr. Gallagher. Before Col. Newcomer gets away from his general statement, I would like to inquire whether he has a copy of the letter that the Chief of Engineers sent to the Secretary of War?

Col. Newcomer. No, sir; I have not, I am sorry to say. That was a typewritten sheet of not more than two pages.

Mr. Gallagher. Can we have a copy of it?

Col. Newcomer. Yes, sir.

Mr. Hulbert. Do I understand that if in the performance of a given improvement there were to be a saving—and, as I recollect it, there was in one case a saving of \$1,500,000—do I understand that upon the completion of such a project the balance would remain to the credit of that particular group of projects or the district?

The CHAIRMAN. If such should be the case, but you will find that

these items for maintenance are comparatively small.

Col. Newcomer. Yes, sir; as a rule. Very few of these items in-

volved here are large.

Mr. Hulbert. Would it not follow that in a harbor like New York, where you have several tributaries, that the balances would be credited to them?

Col. Newcomer. We have not grouped those extensive works. As a matter of fact, in New York there are three districts, and, as a rule, we do not want to group together works that are in different districts and thereby involve a transfer of funds between different disbursing officers.

Mr. OSBORNE. Under this item that has been referred to in the first paragraph, for the maintenance of the Mystic and Malden Rivers, as I understand it, there are some small unexpended balances

for maintenance in these other places?

Col. Newcomer. Yes, sir.

Mr. Osborné. Now, is it necessary in the handling of these unexpended funds that these names should be included in this bill?

Col. Newcomer. To get the authority that is given by this bill—yes, sir: certainly. Otherwise we could not, of course, divert anything from Gloucester to Beverly.

Mr. Osborne. Could you not apply this fund to the credit of Gloucester? Couldn't you apply that without this new legislation?

Col. Newcomer. We could only apply the unexpended balance for Gloucester to Gloucester, of course.

Mr. Osborne. Without this legislation?

Col. Newcomer. Yes, sir. It should be noted that all of the funds appropriated by the river and harbor bill are available until ex-

pended.

Mr. HULBERT. This proposed legislation would permit the transfer of unexpended balances to the credit of Gloucester so that they might be expended in the improvement of the Plymouth River or harbor.

Col. Newcomer. Our attitude toward this is such that we would ordinarily use that liberty only in the case of maintenance funds. I think it would be very rarely the case that we would transfer funds

that had been appropriated for improvement.

Mr. Hulbert. The unexpended balances there, together with that \$24,000, will go into one general fund, and the engineer could expend that with regard to these items in the first group as in his judgment

seemed proper.

Col. Newcomer. The procedure would doubtless be this, under this provision of the bill, if it should be enacted into law: All of the sums remaining to the credit of these different places would go to the credit of the consolidated group and would then have to be re-We would doubtless at once reallot each one of those sums back to the item from which it was taken, and it would be only in case of changing circumstances which would indicate that the transfer should be made that the transfer would be made. If this policy should be carried out the amounts to be appropriated would be based upon itemized statements in the annual estimates for maintenance which would give the amounts we expect during the year to apply to particular localities. Each one of these items and the explanation of it is printed in our annual report. In other words, Gloucester here would be reported upon as a separate project, and Beverly would be reported upon as a separate project. Each one would be reported upon separately. We would give a statement of the funds allotted to them, and of the additional amounts required, but this authority, as I have said, is needed to meet situations that we can not anticipate in advance.

Mr. Hulbert. What is the total amount carried in this bill for

maintenance? Have you a separate statement of that?

Col. Newcomer. I do not have that.
The Chairman. If Col. Newcomer will permit the interruption-Col. Newcomer (interposing). Perhaps Mr. Brooker may know how it is divided.

Mr. Brooker (the clerk). \$5,114,000, which is exclusive of the items for which appropriations are made for improvement and mainte-

nance in an undivided sum.

Col. Newcomer. There are a few cases, but only a few, where the item is for continuing improvement and maintenance, where the district officer did not submit them in such a way that we could separate them here. The total just given is substantially the sum required for maintenance.

Mr. Hulbert. The principal reduction in this bill is from the elimination of new projects carried in the bill passed last February.

Col. Newcomer. Yes, sir.

Mr. Dempsey. So long as you are going to keep the accounts separately, so long as you are estimating separately, and so long as the bookkeeping estimates and accounts are kept separately, what is the

object of combining or grouping them in the bill?

Col. Newcomer. The reason is this, that as long as each work stands alone, without any possible assistance from other work, you are bound to estimate more liberally in order to meet contingencies there. If you do not, you must run the risk of suffering a deterioration which is going to embarrass commerce very seriously. fore you must estimate rather high. Now, we expect that the introduction of this system will permit a reduction in estimates and appropriations, because by getting eight or ten localities in a group like that we would be enabled to meet the increasing needs of one project by the diminishing needs of another. Therefore you can estimate on a more moderate basis.

Mr. Dempsey. By making transfers from one fund to another? Col. Newcomer. Yes, sir. We have not this year made any reduction in the amount estimated for maintenance under the old system, but in the future we expect to do so. That was because these items were not originally considered by groups in preparing the annual estimates or the whole matter was not taken up from that point of view. This bill is based upon estimates made by the district officers under the old system; but under the new system, if adopted, we expect to be more moderate in our estimates for each locality, because, as I have said, you can handle the matter more efficiently under this grouping system.

Mr. Osborne. It seems to me that this would be a practical application of it: It so happens that Mr. Kettner's district and my district are in the same engineer district. Now, if Mr. Kettner in San Diego should have an unexpended balance from maintenance, the engineer of that district, if he should deem it wise to do so, could transfer that unexpended balance to the Los Angeles Harbor, could be not?

He would have the right to do that, would he not?

Col. Newcomer. Yes, sir; with the approval of the Chief of Engineers and the Secretary of War. The district engineer could not do that alone.

The CHAIRMAN. There is one phase of this matter that it seems to me has not been specifically gone into. Now, in answer to particular questions by Mr. Frear and Mr. Hulbert—that is to say, to what extent are the functions of the committee invaded in fixing the gross amount to be appropriated for a group of items for maintenance—if I am correct in my view—and I think I am correct—there is no invasion here of the functions of the committee. In making up the bill. for instance, we come to a group, and we see in the reports of the Chief of Engineers that each item in that group is discussed separately. It is reported, we will say, as necessary for maintenance and is recommended. Now, there may be one or more items in that group for which no recommendations for maintenance are made. committee will take up each item in the group; there may be four items, for one of which there is no recommendation for the appropriation of a maintenance fund.

For instance, the committee will take up item A and decide upon the amount there, and they would, as a usual thing, take the recommendation of the engineers. Then they would consider item B, and then they would consider in the same way item C. Then, having considered those three items, the amount appropriated would be the

gross amount of appropriation recommended by the committee for that group composed of four items. Therefore, the committee would have exercised its responsibility in fixing the amount of the appropriation, and they would have gone into each item separately in order to arrive at that gross sum. This consolidation only affects the administration of the works. When the Chief of Engineers comes to administer them it may well be that, while he may have recommended \$10,000 for item A, some conditions have arisen since his. report which may show him that \$8,000 is sufficient. If so, the \$2,000 saved on item A, with the approval of the Chief of Engineers and the Secretary of War, may go to item D, the fourth item for which no recommendation was made, if, in the meantime, there seemed to be some necessity for it. Therefore, as I stated, the committee still preserves its function of making up or reaching its conclusion as to the aggregate amount needed, based upon the recommendations of the Chief of Engineers as to each separate project. This grouping affects only the administration of the work and the expenditure of the funds by the War Department.

Mr. Hulbert. You have stated that this grouping principle applies only to small items and not to the large projects. If that be the case the large projects are placed at a great disadvantage, because whenever it may become necessary to secure an allotment of funds in order to provide some additional maintenance for a large project, you would have to come to Congress and get a direct authorization for it, whereas, by grouping certain small projects together, if additional money should be required for any of them during a recess of Congress, it could be applied so long as there is a balance. The small projects, under this plan, will be in a position at all times to be improved with any balances on hand from the several projects in the group, whereas the large projects would have to come to Congress and get legislative action, and for that reason this system is unfair

to the large projects throughout the country.

Mr. Costello. Is it not a fact that the large projects are subject to appropriations made covering over several years, and that it would be practically impossible to get sufficient money in one Congress to complete many of them, whereas the small projects are capable of being treated finally by the action of one Congress? In other words, the larger contracts are carried on the basis of continuing contracts, looking to each Congress to appropriate sufficient money to do all the work that is possible to be done in one year.

Mr. Kettner. In answer to my friend, Mr. Hulbert, I will state that Col. Newcomer has just stated—and I think he made it so plain that everybody should understand it—that where they have estimated for these small groups the department could make a great saving, but for the larger ones, the estimates are made in accordance with

the requirements of such large projects.

Mr. Hulbert. The principle is the same in either case, is it not?

Mr. Kettner. No. The department is trying to save all it can, and, by giving them authority to transfer these funds in certain sections, the estimates will be a great deal smaller than they would be if they were estimated for separately. The large projects, as Mr. Costello stated, are carried from year to year.

Mr. Hulbert. What is the difference in principle between making a specific appropriation to be allotted by the engineers in districts

and making a lump-sum appropriation to be allotted by the engineers all over the country?

Mr. Kettner. The same difference there is in preparing for one

small undertaking or several.

Mr. Treadway. Col. Newcomer, referring to your statement at the opening of the hearings, I understood you to say that you regarded this river and harbor work as largely of commercial value. and that you do not feel that the Board of Engineers should pass judgment on military or naval propositions in connections with river and harbor work. Am I correct in that?

Col. Newcomer. I think you are referring to the statement I made bout the report on the work required for the operation of the fleet f defense. We do not, as a rule, in the river and harbor work give auch weight to those other considerations, because the commercial considerations are usually the determining ones. In the East River the commercial needs appear to be the same as the navy's. For instance, the channel between East River and Hell Gate, the demands are the same, but we do not, I think, require the same depth through Diamond Reef where they ask for 40 feet, and where we report 35 feet as sufficient for commercial purposes. In this case a certain need exists for military purposes, but that is entirely aside from and distinct and apart from the need for commercial purposes. I do not know that we should include that in the river and harbor bill. did not include it in the case of the Norfolk improvements nor the San Diego improvement, because it was not required for commercial purposes. That has nothing to do with this bill.

Mr. Treadway. Have you in any way arrived at a conclusion concerning the relative merits or importance of the items consolidated in this bill, other than by taking the arbitrary fact that they were

carried in the last bill?

Col. Newcomer. We have in each instance some considerations

that influenced our judgment.

Mr. Treadway. The bill we have before us now is practically the one that passed the House as it was revised by the Senate committee.

Mr. Newcomer. With a number of eliminations.

Mr. Treadway. So that really the bill itself has not been passed upon by the Board of Engineers from the viewpoint of better pre-

paredness conditions?

Col. Newcomer. Of course the Board of Engineers has not considered it at all. It has only been considered in the office of the Chief of Engineers. We considered there not only items like that of the East River Channel, which has been one for both comercial and naval purposes, but there are other items of special commercial importance, such, for instance, as that question of fertilizers at Tampa. That is recommended because of the importance of transporting fertilizers. Fertilizers are considered to be a matter of special importance at this time in connection with the food question, and for that reason we included that item.

There is the case of the Brunswick (Ga.) Harbor. The additional depth recommended there did not seem to present a matter of urgent necessity, but it was more a question of greater convenience. You might say that it was more a question of convenience than of necessity. In other words, they have to go over the bar on the tides, and while they ought not to be subjected to that delay and interference, they can accommodate themselves to that condition. In other words, the additional depth is needed there, but it is not considered absolutely essential at this time. So I would say that in each case there is some reason why we thought that an item should be included or excluded, as the case might be. That judgment, of course, is based upon our present knowledge of the situation, and it is quite possible that in some cases, on fuller information, we would reach a different conclusion; but we have done the best we could and we are quite willing in each case to tell you why we have included an item or eliminated an item.

Mr. TREADWAY. I did not intend to ask it, but since you have made

that statement I will ask you why Boston was eliminated?

Col. Newcomer. For the reason that the new project proposed there was one to provide for a greater depth only at the outer entrance, which was rendered advisable on account of wave action. It does not give an increased depth to the docks at all, because the inside channels will remain at 35 feet, but solely for convenience in entering a port like that it is desirable to have an increased depth over the bar outside. It is only a question of providing greater convenience in getting in. It is a very desirable matter, but it is not a need of any urgent character. It is a case where a few hours' delay will enable them to meet the situation.

Mr. TREADWAY. That is the commercial situation?

Col. Newcomer. Yes, sir.

Mr. Treadway. You are not referring to the question of getting to

the navy yard?

Col. Newcomer. It is the same thing in that respect. We do not require any increased depth to the navy yard. That depth is 35 feet. Mr. Treadway. There are two or three more questions that I would like to ask. What is the need in this bill for items for surveys?

Col. Newcomer. We did not really pay much attention to the question of surveys. That is a matter that we did not consider especially important from our point of view. There are a great many of those items in here that appeal to me as being superfluous. At the same time they could be taken up if time permits. I do not see any particular objection to them, and the amount, I think, is not great. If any locality feels that its commercial needs should be investigated I do not think they should be prevented from having an investigation.

Mr. Treadway. You assumed that those in the list carried in the

bill were the most important ones for consideration?

Col. Newcomer. We eliminated one item from the list. That was the item relating to Minnesota and North and South Dakota, wherein an appropriation was made for investigating a flood proposition. At the present time there is a flood-control act which prescribes the method of procedure for the investigation of floods, and it seemed to us that it ought to be handled by that method and not at the expense of river and harbor funds.

Mr. Treadway. In case work is temporarily suspended on river and harbor projects, in your opinion, what depreciation will take

place in the plants that were in operation on such projects?

Col. Newcomer. I think that the principal disadvantage or trouble that would result from the failure of river and harbor appropriations would not relate so much to the condition of the Government's plant, but it would be reflected in the condition of the improvements

as transportation agencies. In other words, they would not be in a condition where it would be possible for them to serve the country's

Mr. Treadway. In your opinion, there would not be much actual depreciation of the Government's property if the work was sus-

Col. Newcomer. No. sir: not of the Government's plant.

Mr. Treadway. Of course, on the other hand, there would be some works of improvement left in an unfinished state?

Col. Newcomer. Yes; there would be.
Mr. Treadway. But the loss on the actual property of the plant

would be negligible?

Col. Newcomer. So far as the actual property is concerned, the loss would probably not be great, because we have certain funds on hand from which we can provide for the essential care of the property. Of course, you have great big expensive plants that are idle and not doing sufficient work to provide any return on the investment, which is a matter to be considered.

Mr. TREADWAY. Just one more question: What, in your opinion, would be the damage to the present established navigation of rivers

by failing to continue the existing work?

Col. Newcomer. I think it would be quite considerable. The work we are doing is accommodating, in the aggregate, a very large tonnage, and that tonnage, of course, would all be exposed to the difficulties that would come from lack of maintenance of the channels.

Mr. Treadway. A maintenance appropriation would practically

continue the present navigable condition, would it not?

Col. Newcomer. Yes, sir.

Mr. Treadway. You mean by that: Suppose there is a sand bar coming in the river, your idea of maintenance is, if you know that sand bar is sure to come, in so many months, your plant is there to clear it out?

Col. Newcomer. Yes, sir.

Mr. Treadway. I am not using engineering expressions, of course, but that is the thought you had in mind.

Col. Newcomer. Yes.

Mr. Treadway. And that is what maintenance means—it is to continue the existing conditions in the channels; am I right about that?

Col. Newcomer. Exactly.

Mr. Treadway. So that a maintenance item would practically keep

navigation conditions as they now are, in your opinion?

Col. Newcomer. Certainly; it would do that. Of course, there is also the question, if you decide to give only a sufficient amount to cover maintenance and make no provision for continuing improvement work, that there are many cases where we have large plants involved which would be thrown out of occupation, and not only Government plants but contractors' plants; and you would have no progress made in carrying to completion an improvement like that of the Ohio, for instance, which involves a total expenditure of seventy-five millions. You have already spent in there, or authorized the expenditure of, I think, in the neighborhood of forty millions. And if you let that work lie of course the work that has been done will be useful, but the more you do the more useful it becomes; because every additional lock and dam that is built brings into use just so much more territory which it will serve.

Mr. TREADWAY. Has the scarcity and high price of labor been given any consideration? Are you likely to be embarrassed by a

lack of people to work at the various plants?

Col. Newcomer. We are likely to be embarrassed by the difficulty in getting labor and materials. These estimates are the estimates that we made last year, and they have not been increased on account of that consideration; but we will undoubtedly be embarrassed in carrying out some of these projects because of those conditions. However, we will be able to do considerable work of maintenance with this money we expected to use, as far as that is concerned, and we probably will be able to take care of the most urgent features of the work.

Mr. Costello. Many of the large projects of the Government for the improvement of commerce, or for the benefit of commerce, or improvement of the harbors, are in the nature of continuing contracts. A man bids to complete a certain character of improvement which might involve work covering a period of five or six years. In the event of our not appropriating the money to continue that work the contractor, or even the Government itself, might lose the interest on the investment in the plant; and in the case of a private contractor there is a question whether the Government would not be liable for such deterioration and loss as the contractor would be put to due to the suspension of work of that character.

Mr. Hulbert. There are a lot of continuing contracts, but they are all carried in the sundry civil bill and do not come in here at all.

Mr. Costello. I just wanted to know, and I am asking the colonel. Col. Newcomer. The contract liabilities of the Government are taken care of in the sundry civil bill. Of course there are a great many contractors engaged on work, as on the Ohio River, for instance, where we do not have a continuing contract in force, who expect to continue on that work because the Government has practically obligated itself to a certain program of procedure there, and they are expecting to use their plants in that work under new contracts, as the Government provides the appropriations. They would have no contract claim, of course.

Mr. Costello. In your judgment, as an engineer connected with the War Department, with many years experience in this particular character of work, it would be a mistake for Congress not to pass a rivers

and harbors bill this year?

Col. Newcomer. I certainly do think it would be a mistake for Congress not to pass a river and harbor bill this year. And, moreover, I think it would be very desirable to provide for a number of additional new projects, as far as that is concerned. I do not see why the transportation service of the country should be allowed to run down at this time when we need the maximum efficiency of every Government agency. In other words, we have taken a backward step, on account of the present emergency, by withdrawing some of these improvements which ought to be included. But we are trying to meet the desire of Congress, as we understood from the recent action here regarding this matter, that you would not take up a general bill, but would only take up the more urgent matters. This bill was framed

to meet that understanding; but we think there are other items which

are excluded that are desirable projects.

Mr. Frear. About what is the amount of reduction in the bill as proposed and the bill as it passed the House at the last session, after deducting the Mississippi River item?

Col. Newcomer. As I recall, it would be, I think, somewhere be-

tween six and eight millions.

Mr. Frear. That is after deducting six millions for the Mississippi River item?

Col. Newcomer. Yes, sir; after deducting the six millions for the

Mississippi River.

Mr. Gallagher. You are speaking of the bill as it passed the Senate now?

Col. Newcomer. Yes, sir; the Senate bill.

Mr. FREAR. But the Senate has added quite a number of items to

the bill as it passed the House at the last session.

Col. Newcomer. Yes; the Senate has added quite a number of items; but it did not materially change the total, because it took out the appropriation for the purchase of the Delaware & Chesapeake Canal and put in a small sum for its condemnation. But it did put in some additional new projects, and we simply took their bill as a basis of consideration for what we have here.

Mr. Dupré. Before we get to the consideration of particular items. I would like to make inquiry as to an item not in the bill. Is this bill drawn on the theory that the sundry civil bill or some other bill emanating from the Appropriations Committee is going to take care

of the lower Mississippi River improvements?

Col. Newcomer. Yes, sir. The sundry civil bill had an item in it, as it went to conference, providing for the Mississippi River.

Mr. Dupré. Have you any assurance that the House conferees are going to abide by the Senate amendment?

Col. Newcomer. I do not know. I do not understand that the conferees have met. But that bill is the place for that, just as Mr. Hulbert stated a moment ago, as the work is practically on a continuing contract basis. And a Senate amendment providing for it on that basis has been added to the sundry civil bill, and that is the place for it.

Mr. Kettner. Are there any items not in the Senate bill now being

provided for in the sundry civil bill, the Army, or the Navy bills?

Col. Newcomer. There are only two items I know of—the Sacramento River and the lower Mississippi. These are being provided for in the sundry civil bill and are taken out of-

Mr. Kettner. I know there were some projects provided for or suggested to the Naval Committee. Were they taken from this bill?

Col. Newcomer. Oh, no; they were not taken from this bill; they would remain in this bill. They are being made large enough, as recommended by the Navy Department, to facilitate the operation of our fleet of defense. Those facts have been reported to Congress; but as to where they should be put, I do not know.

Mr. Gallagher. What improvements for military operations are

going to be taken care of in the naval bill?

Col. Newcomer. The East River is in this bill and the improvement of Norfolk Harbor.

Mr. Gallagher. Why, in the East River they have plenty of depth there-

Col. Newcomer. The depth provided for the East River is the same as the depth through Hell Gate. That is 35 feet. And the bill that was passed by the House and reported to the Senate had an item for the East River.

Mr. Hulbert. Did not the recommendation made by the Secretary of War and the Secretary of the Navy under that project, as contained in the last naval appropriation bill, provide for a 40-foot channel for naval purposes through Hell Gate?

Col. Newcomer. Ultimately.

Mr. Hulbert. Is there any reason why the channel for naval purposes through Hell Gate should be of any less depth than the chan-

nel over Diamond Reef?

Col. Newcomer. Of course, that is a question which the naval authorities have to decide upon, and they have recommended that there be provided immediately a 35-foot channel through Hell Gate, and

ultimately a channel of 40 feet.

Mr. Hulbert. Will not the same vessels that use that channel going in and out of the navy yard have to use this channel, and, therefore, if it is necessary to make a 40-foot channel through Diamond Reef isn't it equally necessary to make a 40-foot channel through Hell Gate?

Col. Newcomer. I do not think it is equally necessary, because I think if it were the naval authorities would say so.

Mr. Hulbert. I understood they had said so.

The CHAIRMAN. Now, gentlemen, we will proceed with the various

Colonel, take up the first item, on page 2, among the recommendations of the Secretary of War, "Gloucester, Beverly," etc.—a group of items in Massachusetts—where a recommendation of \$24,000 for maintenance is made. Will you please explain to the committee that

grouping and how you arrived at the aggregate estimated for there?

Col. Newcomer. These are practically all of the harbors on Massachusetts Bay-that is, from Newburyport, on the Merrimac River, to Cape Cod, except Boston Harbor. We thought Boston Harbor ought to be handled as a separate item, and all the others were included in this one item, and the amount there is the same amount as estimated for before.

Mr. Booher. The gross amount here is the same as the amount

estimated for all those items in the other bill?

Col. Newcomer. Yes, sir; it is the same amount as estimated for in the annual report for all those works.

Mr. Frear. For this group \$24,000 was estimated for the maintenance of the Mystic and Malden Rivers, and then there was a further sum of \$10,000 included in the total, which this item does not include?

Col. Newcomer. Exactly.

Mr. Hulbert. As I recollect, last February, when you appeared before the committee, you stated that \$24,000 was the least amount you could get along with for the improvement of the Mystic and Malden Rivers; so that you do not now contemplate spending any

part of that \$24,000 item in that first group for the improvement of those rivers?

Col. Newcomer. We do not expect to spend it on any of the

other items: no. sir.

The CHAIRMAN. Are there any other questions regarding the first item? If not, we will take up the second:

Stonington and New London Harbors, Conn.; Pawtucket River, R. I., and Conn.; and Mystic and Thames Rivers, Conn.—for maintenance, \$10,000; for completing improvement of New London Harbor, \$160.000; in all, \$170,000.

Mr. Frear. Let me ask Col. Newcomer there. Is that for commercial needs or for the public defense; or is there any particular

urgency for that improvement?

Col. Newcomer. The urgency there is commercial. That is an important harbor, where the State is going to large expense to build terminals and where the Government has obligated itself to give them this additional depth of water. And we think that ought to be

Mr. Frear. This is a new project, although it was included in the

last bill?

Col. Newcomer. It is not a new project; it is an adopted project, and this is for the completion of it.

Mr. Frear. That is right; I stand corrected. Col. Newcomer. Yes.

The CHAIRMAN. The next is:

Duck Harbor, Branford, New Haven, Milford, Bridgeport, Southport, Norwalk. Five Mile River, Stamford, and Greenwich Harbors, Westport Harbor, and Saugatuck River, breakwaters at New Haven, and Housatonic River, Conn.—for maintenance, \$71,000.

Are there any questions on that item?

Mr. Frear. In that case, have any specific amounts been set apart for these various projects making up the total of \$71,000 for the group?

Col. Newcomer. Yes, sir.

Mr. Frear. Could you suggest what the items are, in order that we may have some intelligent understanding of them? For instance, it begins with Duck Island.

Col. Newcomer. I would have to look into the bill. These are all harbors that are grouped along the Connecticut coast, and the largest

Mr. Frear. New Haven Harbor is the first item, \$14,000.

Col. Newcomer. \$14,000 for that.

Mr. Frear. Bridgeport?

Col. Newcomer. Bridgeport Harbor is \$24,000; Norwalk Harbor, \$8,000. We cut out there the additional improvement of Norwalk Harbor, and there is \$17,000 for the group that was there before— Five Mile River, Stamford, and Greenwich Harbors, Westport, and Saugatuck River—and we have incorporated that group in this larger group.

Mr. Frear. And also the Housatonic River?

Col. Newcomer. The Housatonic River is \$8,000. I may say that for any one of these cases you will find the amounts for maintenance given, item by item, in the Senate bill. We have simply grouped them together here.

Mr. Frear. These are not connected with the national defense?
Col. Newcomer. These are items that are commercial—for main-

tenance.

The CHAIRMAN. The next item is Connecticut River above and below Hartford, Conn.—continuing improvement and for maintenance below Hartford, \$70,100.

Mr. Frear. Referring to that item, there has been added to the phraseology Conecticut River "above," compared with our former

bill?

Col. Newcomer. Yes, sir.

Mr. Frear. And I remember that is in relation to another project. Col. Newcomer. There is a project above Hartford and one below. Mr. Frear. This is permitting the expenditure of part of this item on the project above?

Col. Newcomer. Yes. There is nothing asked for above Hartford,

and this is now to take care of "below" Hartford.

Mr. Frear. Is there any commerce above Hartford?

Col. Newcomer. Very little, and there is very little work up there. The Chairman. The next item is, Burlington Harbor, Vt.; Plattsburg and Port Henry Harbors, N. Y.; and Narrows of Lake Champlain, N. Y. and Vt., for maintenance, \$5,000; for improvement of Narrows of Lake Champlain in accordance with the report submitted in House Document No. 1387, Sixty-second Congress, third session, and subject to the conditions set forth in said document, \$300,000; for completing improvement of Port Henry Harbor in accordance with the report submitted in House Document No. 369, Sixty-fourth Congress, first session, and subject to the conditions set forth in said document, \$71,500; in all, \$376,500.

Mr. Hulbert. I take it that Port Henry improvement is to afford

a means of taking ore out of the iron mines?

Col. Newcomer. It is an iron-ore proposition.

Mr. HULBERT. There is an annual shipment there of about a million tons.

Col. Newcomer. It is about a million tons. The purpose of this improvement is to make available a sufficient channel through the narrows at the end of the barge canal which the State has built and which is finished.

Mr. Hulbert. Yes; that is in operation.

Col. Newcomer. That is in operation, and we have here in the narrows a very obstructive bend where we can not take a big boat around it.

Mr. Treadway. Is that in north Lake Champlain, or south?

Col. Newcomer. South.

The CHAIRMAN. The next item is Olcott, Charlotte, Pultneyville, Great Sodus Bay, Little Sodus Bay, Oswego, Cape Vincent, and

Ogdensburg Harbors, New York; for maintenance, \$33,500.

Mr. Dempsey. Olcott is in my own district. The piers there are out of repair. The tops of the piers are substantially gone, and in order to preserve them it is necessary, is it not, to have some work done there at once?

Col. Newcomer. There was no estimate for Olcott Harbor, as I recall, for the coming year. I will look that up in a moment. In

that case the traffic apparently has practically ceased.

Mr. Dempsey. That is true there is very little traffic there; but in the summer it is used for pleasure purposes and there was until recently traffic with Toronto. And I understand they propose to put on a line of boats again this summer. Now, just to maintain that harbor, just to keep the piers so they won't absolutely be ruined, it is

necessary to have some work done there at once.

Col. NEWCOMER. The company which was running that boat agreed to maintain the pier and channel as a consideration for the Government doing certain work there; so that we understood the situation was adequately taken care of in that way. The report states no operations are proposed during the next fiscal year unless there should be a revival of traffic, which would require redredging of the channel. Should such redredging become necessary, funds available are sufficient for the purpose; hence no estimate of funds is submitted.

Mr. Dempsey. What page is that?

Col. Newcomer. Fifteen hundred and twelve of the Annual Report of the Chief of Engineers.

Mr. Dempsey. If there is any necessity why could it not be cared

for by this time?

Col. Newcomer. Of course, funds are available and that is one of the items. If it is included in this group and work is needed there and funds could be spared, of course it could be paid for from this appropriation; there is no question about that.

Mr. Dempsey. You say there are funds available; what funds are

available?

Col. Newcomer. There is a balance remaining unexpended of

Mr. Dempsey. That could be used for this work, aside from this appropriation?

Col. Newcomer. Yes, sir.
The Chairman. Might I suggest, Mr. Dempsey, this would illustrate one of the advantages of the group system; because if there is anything left over from maintenance projects for which appropriations have been estimated, then, in the discretion of the Chief of Engineers, it would be utilized for this improvement if you can show that it is necessary.

Mr. Dempsey. To whom should I come to see about the use of that

\$1.800 for that immediate necessity?

Col. Newcomer. Of course, the district officer is the one who handles that, and he is Maj. Frazier at Buffalo. Of course, it is my desk in the Chief of Engineers' office that handles the problem here, but we always refer it to the district engineer for report.

Mr. Hulbert. Substantially all of this \$33,500 provided for in this item will be for the improvement of the Great and Little Sodus Bays.

according to the last bill?

Col. Newcomer. That is right; yes, sir. There was \$21,500 for the

Great Sodus Bay and \$12,000 for the Little Sodus Bay, before.

The CHAIRMAN. The next item is Port Chester, Mamaroneck, and Echo Bay Harbors, East Chester and Westchester Creeks, and Bronx River, N. Y.: Completing improvement of East Chester Creek, \$11,000.

Mr. HULBERT. I would like to ask a question there. When we made up the last bill you stated \$26,000 was required for the im-

provement of Port Chester Harbor?

Col. Newcomer. Yes, sir.

Mr. Hulbert. And \$11,000 for East Chester Creek—making a total of \$37,000. Do you feel now, Colonel, that you can eliminate the \$26,000 item and take care of Port Chester out of the amount which was provided in the last bill for East Chester Creek alone?

Col. Newcomer. We do not expect to provide for any further improvement of Port Chester at this time. This amount here, you see, all goes to East Chester Creek, as provided in this item. And there was no estimate for maintenance for any one of these works before. There was an item for continuing the improvement of Port Chester which we thought might be eliminated.

Mr. Hulbert. Did you eliminate it because it is a continuing im-

provement?

Col. Newcomer. Because we do not think it is as urgent as the

Mr. Hulbert. Is that the policy which has been pursued in making up all of the items—to eliminate items for continuing improve-

Col. Newcomer. Only some of the items have been eliminated. We have taken out some of the items in order to prune the bill down to the items which are the most urgent. We have taken out certain items of continuing improvements, as well as certain items of new projects.

Mr. Hulbert. Do you regard the improvement of East Chester Creek as of greater importance than continuing the improvement of

Port Chester Harbor?

Col. Newcomer. Yes, sir. The Chairman. The next item is:

Saugerties, Rondout, Peekskill, and Tarrytown Harbors, and Wappinger Creek, N. Y.: For maintenance, \$3,500.

Are there any questions on that item?

The next item is:

New York Harbor, N. Y.: For maintenance, including Ambrose Channel, \$40,000; for improvement of channel between Staten Island and Hoffman and Swinburne Islands, in accordance with the report submitted in House Document No. 25, Sixty-fourth Congress, First session, \$50,000; in all, \$90,000.

Mr. Hulbert. Colonel, do you regard the improvement of the channel between Staten Island and Hoffman and Swinburne Islands as more important at this time than the improvement of the Upper Bay Anchorage Grounds?

Col. Newcomer. This is considered more urgent; yes, sir; because the channel below does not provide a sufficient depth for that boat

they are going to put in the quarantine service there.

Mr. Hulbert. You regard the same channel as of more importance for improvement than Bay Ridge and Red Hook Channels?

Col. Newcomer. Yes, sir; for the amount involved.

Mr. Hulbert. Have you considered the urgency of the Bay Ridge and Red Hook Channels in connection with the enormously increased shipments of food supplies and other necessities to be sent over to

Col. Newcomer. Yes, sir.

Mr. Hulbert. And do you think the conditions of the Bay Ridge and Red Hook Channels, at the present time, are sufficient to meet the present needs of the merchants and their needs in the immediate

future?

Col. Newcomer. Well, we think in that case, as in many other cases where items have been omitted, that although the work proposed before was very desirable work, we do not consider it as of the same degree of urgency as are the others. We do not consider, for instance, that the work is of the same class as the work to give access to the new pier which is now not accessible at all, up in the Hudson River. They already have pretty good channels at Bay Ridge and Red Hook.

Mr. Hulbert. Why have you eliminated the item of \$250,000 for

continuing the improvement of the Harlem River?

**Col. Newcomer. That was done by Gen. Black personally. I had at first included it, myself, because I was not as familiar as he was with the local situation. He said he thought that amount could be spared, in view of the amount now on hand, as not being as urgent as some of the other items.

Mr. Hulbert. You are familiar with the fact that we now have in the Harlem River a stretch with only a depth of 12 feet, at Macombs

Dam Bridge?

Col. Newcomer. I do not know of any place in the Harlem River where there is only a depth of 12 feet for any distance. Of course, there are some places which may show only that depth; but I do not think it is limited to that.

Mr. Hulbert. Yes, there is a stretch there with only a depth of 12

feet, right near the bridge.

Col. Newcomer. You mean it has been there for some time?

Mr. Hulbert. Yes.

Col. Newcomer. And that has never been taken up as an improve-

ment?

Mr. Hulbert. Of course this river has a commerce of a billion and a half dollars per annum, and I was wondering whether they were going to suspend operations on a stream of that importance where the work under way is to bring the minimum depth up to the average

depth of the river?

Col. Newcomer. You will find there are considerable funds on hand for the Harlem River. We had an appropriation of \$250,000 made last year; so that there was available for this year \$274,000, and there was the sum of \$231,000 available the 1st of March, I mean, unexpended. Of course contracts for much of that amount have been approved. The amount appropriated last year has not all been placed under contract. But taking into view that situation and following the general principles in framing this bill, the Chief of Engineers concluded that that item could well be omitted at this time, or rather, could properly be omitted.

Mr. Hulbert. I want to call your attention to page 222 of the

report for 1916:

Condition at the end of fiscal year: About 61 per cent of the work proposed under the existing project (which, by the way, was adopted in 1879) has been completed. The work done under all projects has resulted in making a channel 15 feet deep at mean low water and 400 feet wide from the East River to Putnam Railroad bridge, except at a few points, where the channel is somewhat narrowed by shoals, and at Macombs Dam Bridge, where the available depth is 12 feet in the westerly draw opening; the easterly one is not navigable, being obstructed by ledge rock (now in process of removal).

Now, is the amount on hand sufficient to continue the removal of the rock ledge in that channel?

Col. Newcomer. It so states on page 223, under "continuing opera-

tions":

Work at Macomb Dam Bridge is now under way and should be completed in the spring of 1917.

In other words, I understand that they will get a channel through

there; they will not get all of the rock out.

Mr. Hulbert. The folks up there now are complaining of the obstruction, that it is making it difficult for the present commerce, and that when the barge canal is put in operation this spring there will be a tremendous increase in commerce.

Col. Newcomer. Of course, the rock will be removed to a certain extent. The barge canal is a very different proposition, as you have here a tide of between 4 and 5 feet, and, so far as the barge-canal boats

are concerned, you have a sufficient depth now.

Mr. HULBERT. But there are also certain hours of the day when they are prevented from opening those bridges.

Col. Newcomer. That is true.

Mr. Hulbert. And that very largely controls the advantages we get from the tide. In other words, it makes it necessary to have a uniform channel there of 15 feet during all the 24 hours.

The Chairman. Are there any further questions, Mr. Hulbert?

Mr. HULBERT. No; that is all.

The CHAIRMAN. The next item is:

Hudson River Channel, New York Harbor, N. Y.: Continuing improvement, \$210,500; for improvement in accordance with the report submitted in House Document No. 1697, Sixty-fourth Congress, second session, \$600,000; in all, \$810,500.

Mr. Hulbert. I assume that is to take care of the condition at the Forty-fifth Street piers and also the widening of the river down by Canal Street?

Col. Newcomer. That is right.

The CHAIRMAN. The next item is Black Rock Channel and Tonawanda Harbor, N. Y. The unexpended balances of appropriations heretofore made and authorized for this improvement are hereby made available for Lake Erie entrance to Black Rock Channel and Erie Basin and for widening the channel at the bend.

Mr. Dempsey. I have quite a little on that, Mr. Chairman.

Now, Colonel, you know as a fact that the steel mill down there below North Tonawanda has been closed for two or three years. It had a million-and-a-half to a two-million-dollar business, employed a very large number of hands, had a weekly pay roll of, I think, over \$5,000, but in competition with, for instance, the Lackawanna and that new mill farther up, on account of their being able to handle ore with boats that drew more water, the mere difference in the handling of ore with larger boats put that concern out of business, and, as I understand it, the benefits from the use of that new ship canal are lost. Now, as I understand this item, the department has been waiting for the town of Tonawanda to lower the intake pipes. They have had an election up there, and they have voted to lower the intake pipes and issue bonds, and that project will be taken care of in

the next few weeks. I do not know whether they are at work at it now, but at any rate they are ready to let the contract. There is only \$6,000 of this money on hand, and the project is going to cost between two hundred and fifty and three hundred thousand dollars—I think \$250,000. Now what are we going to do about that; what condition are we in?

Col. Newcomer. This does not affect that at all.

Mr. Dempsey. It does affect it in one way, doesn't it? It takes away from the improvement of the channel lower down and puts it

up toward the upper end, where we do not need it as badly.

Col. Newcomer. Oh, no, sir; it does not take away, it simply permits us to spend as much of this money as we feel we can afford to take away for the entrance. That entrance is not properly taken care of under the present situation. We expect to take care of the situation below with funds on hand, and we have a contract authorization which will permit us to make contracts. Of course, the money will have to be supplied later in the sundry civil bill. This does not effect that situation at all. We won't allow this authorization to prejudice the other work; the other work is an important work, and we expect to go ahead with it as fast as we can, as soon as condi-

tions permit, which is the lowering of that pipe.

Mr. Dempsey. Suppose the two cities are ready to let the contract for the lowering of those intake pipes and they have the idea that that could be combined with the contract for the improvement in the lower river with advantage to them and to the Government; in other words, that the work of lowering the intake pipes would really be a part of the work of deepening the channel, and that any contractor would take the combined work at a more reasonable figure than he would the work separately? Is there any reason why that could not be done, why the contracts could not be advertised and let simultaneously? Of course, there would be separate contracts with the municipalities, but could not the United States Government advertise and let its contract at the same time?

Col. Newcomer. That appeals to me now as a practical proposition. There is a provision of law which permits the Government to accept funds from a locality to be used in connection with expenditures to be made by the Government in any given locality, and I think this might be combined in that way. Of course, here we are faced by the situation that there is a condition which must be fulfilled by the locality in order to permit the Government work to proceed, and I think we might have to submit that to our legal advisors as to whether the incorporation of the work in the same contract with the Government would meet the legal situation. If they

could do that I think the other features could be arranged.

Mr. Dempsey. You understand there is a new iron and steel plant that has located there just in the last few months; it has just come

there!

Col. Newcomer. No; I was not aware of that. But this would not affect that. This is another illustration of the benefits from grouping. In other words, here is this entrance for which we now have no separate appropriation, no separate way of taking care of it, and yet it would be included in this, because it is really a part of this channel.

Mr. Dempsey. There is not any doubt about the fact you have a contract authorization, so that the work can go on as soon as the two

municipalities have complied with the condition precedent?

Col. Newcomer. The only difficulty would be if the work proceeded rapidly the contractor might have to wait for his money. That, of course, is a disadvantage.

The CHAIRMAN. The next item:

East River, N. Y.: Continuing improvement in accordance with the report submitted in House Document No. 188, Sixty-third Congress, first session, \$1,250,000: Provided, That a depth of 40 feet is authorized across Diamond Reef: Provided further, That the unexpended balance of appropriations heretofore made and authorized for a depth of 35 feet across Diamond Reef are hereby made available for a depth of 40 feet: And provided further, That so much as may be necessary of this and any other appropriations made herein or hereafter for specific portions of New York Harbor and its immediate tributaries may be allotted by the Secretary of War for the maintenance of these waterways by the collection and removal of drift.

Mr. Hulbert. I would like to propound this inquiry: Col. Newcomer, when the bill which passed the House last February was before the Senate Committee on Commerce Gen. Black appeared there and was heard on this item and, as I am informed by members of that committee, as a result of his testimony this provision was incorporated when the bill was reported out by that committee:

Provided futher, That the Secretary of War may enter into a contract or contracts for such materials and work as may be necessary to prosecute the said project, to be paid for as appropriations may from time to time be made by law, not to exceed in the aggregate \$6,500,000, exclusive of the amounts herein and heretofore appropriated.

Can you tell me why that provision was abandoned and that lump-

sum appropriation of \$1,250,000 substituted?

Col. Newcomer. Subsequent consideration of that matter led to the conclusion that the best thing to do immediately was to undertake the work that could be completed most rapidly and afford a practicable channel. The channel now contemplated, for instance, over Diamond Reef is only half the full width. The present authority is for a channel 35 feet deep, but when we get through that channel will be from 35 to 40 feet deep.

Mr. Hulbert. Of the same width?

Col. Newcomer. Of the full width at the ends, but there is a central portion of that channel where we can get between 35 and 40 feet for a width of 400 feet. At the ends it will be 40 feet deep for the full width of 1,000 feet. We are not certain about the rock in the central part of the channel, because that is 35 feet deep and has not been explored so fully. The explorations heretofore have been to get a 35-foot channel. But we can get there a channel of between 400 and 500 feet wide, without any rock removal, and of a depth varying from 35 to 40 feet; and the idea was to make a contract for that part not involving rock removal with the delay that it would involve, and by so doing get a very much improved facility over what they have now. That would require, in addition to what we already have for the item, the sum of \$250,000. In other words, if you make available the money already appropriated and authorized, and we can get \$250,000 additional, we can get this channel from 400 to 1,000 feet wide and increasing the depth materially over what they have at the present time, without rock removal. Then, at Hell

Gate, instead of providing for the entire widening at that place, which it was contemplated before would cost, as I recall, about \$3.600,000, or in that neighborhood, the expenditure of \$1,000,000 will get you a channel which the district officer reports would be, I think, 500 feet wide. This amount anticipates the removal of pot rock, channel through reef between Halletts Point and Frying Pan 500 feet wide, and small amount from western end of middle reef. That, of course, is a very contracted place—Hell Gate—and the former estimate had been for a more commodious channel than this. But with this million dollars they could provide for getting a 35foot depth there, which is a practicable channel; and we thought that a better proposition than to take up now probably a larger work which would extend over a number of years.

Mr. Hulbert. This improvement of Hell Gate is connected with

the national defense more than the commercial requirements.

Col. Newcomer. It is part also of the commercial proposition.

has been recommended as a commercial proposition.

Mr. Hulbert. But is being limited now to meet the needs of the

national defense?

Col. Newcomer. This will provide for the work we can do in the shortest length of time, in order to get a practical channel through there. That is the idea.

Mr. Hulbert. There is a bend in the river at Hell Gate?

Col. Newcomer. Yes, sir.

Mr. Hulbert. Isn't it a fact that the battle cruisers now under construction have a length of over 800 feet?

Col. Newcomer. Something like that.

Mr. Hulbert. And if you only have a channel 35 feet deep and 400 feet wide, will it be possible for those vessels to make the turn at that bend?

Col. Newcomer. Of course they can make the turn, but they will

have to wait for a suitable tide.

Mr. HULBERT. In other words, after you have made the improvement you now contemplate, in order to accommodate the largest vessels that would have to take advantage of that channel, there must be the most favorable conditions of the tide?

Col. Newcomer. Yes. I think they would anyhow.

Mr. Hulbert. At the low stages of the tide would the channel be sufficient?

Col. Newcomer. Oh, yes; the depth of channel would be sufficient. Mr. Hulbert. Haven't these colliers that come in and out of the Brooklyn Navy Yard a draft of 33 feet?

Col. Newcomer. I do not know that any of them have as much as

33 feet draft.

Mr. Hulbert. I know some that have.

Col. Newcomer. There possibly may be some that have. Mr. Hulbert. I know some that have. Assuming those colliers have a draft of 33 feet, could they be accommodated in this 500-foot channel through Hell Gate except at the very height of the tide?

Col. Newcomer. Oh, yes; they could be accommodated on the slack of the tide, either high or low. The great trouble at that place is the swiftness of the current, and in order to take a large boat through safely most of the boats would probably go through only on the slack of the tide.

Mr. Hulbert. Of course my information, which I have gotten from

pilots, is that the boats could not get through there.

Col. Newcomer. Do you mean your pilots have given you information as to what they could do if they had a 35-foot channel there or what they do now?

Mr. Hulbert. They tell me a 500-foot channel would not be suffi-

cient for the naval vessels.

Col. Newcomer. We have boats moving in channels of that size. We, of course, do not maintain, Mr. Hulbert, that a 500-foot channel is an adequate channel there. It is simply the channel that can be provided the quickest and get a passage. You can not get through there at all now.

Mr. HULBERT. As a matter of economy, wouldn't it be better to undertake to provide the necessary channel in order to get adequate

accommodations than not to undertake any at all?

Col. Newcomer. It did not appeal to us that way. We feel there is an emergency that has to be met by an emergency measure.

Mr. Hulbert. In other words, this is simply now an emergency

proposition?

Col. Newcomer. As far as this particular proposition here is concerned it is an emergency measure to get the best we can in the

Mr. HULBERT. It does not in any sense of the word comply with the recommendations by the Secretaries of War and Navy in the last

appropriation bill for a military channel through Hell Gate. Col. Newcomer. This is the first step for that program in that

locality.

Mr. Dupré. This item in the bill as it passed the House provided for \$500,000. I notice it is now increased to \$1,250,000. Will you

kindly explain briefly why that increase is made?

Col. Newcomer. That was, for one reason—I have just explained that to Mr. Hulbert—because subsequent consideration led to the conclusion that it would be better not to make a long-time contract covering all of the work involved, but to make contracts involving only work that could be done most expeditiously so as to get a facility through there and afford a passage for the boats. And this does that. Of course one thing was to cut out the continuing contract feature of it. As a matter of fact, a part of this sum possibly could be made a continuing contract authorization if you preferred to do it, because we could not probably spend the whole million dollars in that one year. We could spend a good part of it, but not all. And the idea was to provide with cash for the work that could be done most promptly to provide the needed facility for getting through. Mr. Dupré. Isn't there an enlargement of the project?

Col. Newcomer. Yes. The 40-foot channel at Diamond Reef is purely to meet that naval situation. We included it here because it was included before in the Senate bill.

The CHAIRMAN. I also understood you to say that the larger sum might enable you to effect economies in the making of contracts?

Col. Newcomer. Yes. This sum was made as small as we could and still get what we considered a satisfactory or advantageous. contract.

Mr. HULBERT. As I understand it, after the adoption of this project, in order to increase the depth to 40 feet, it will necessitate the adopting of a new project?

Col. Newcomer. Forty feet through Hell Gate?

Mr. HULBERT. Yes.

Col. Newcomer. Oh, yes, sir.
Mr. Hulbert. What is the use of adopting one project now with the object of adopting a greater project later on for a greater width and greater depth?

Col. Newcomer. Of course that can be done when the Navy asks

for it.

Mr. Hulbert. Haven't you deferred entering upon the work of Diamond Reef, which was authorized some time ago, waiting for an authorization to make this channel 40 feet deep and 1,000 feet wide, and wouldn't such an authorization now effect a very substantial economy and not necessitate the work being done twice?

Col. Newcomer. That is true, Mr. Hulbert.

Mr. HULBERT. And won't the same necessity for effecting that economy apply at Hell Gate as applies at Diamond Reef? other words, won't it be doubling the expense to undertake cutting a channel now of 35 feet through Hell Gate and subsequently increasing it to a channel of 40 feet?

Col. Newcomer. Undoubtedly it will increase the expense-

Mr. HULBERT. Wouldn't it be cheaper, in other words, and more economical, to adopt a project for 40 feet for the main channel through Hell Gate, the same as we have at Diamond Reef?

Col. Newcomer. Under normal conditions it would be.

The CHAIRMAN. Keyport and Shoal Harbors, Woodbridge. Cheesequake, Matawan, and Compton Creeks, Elizabeth, Raritan, South, and Shrewsbury Rivers, and Raritan Bay, N. J.—for maintenance, \$58,000. Are there any questions regarding this item, Cold Spring and Absecon Inlets, Absecon and Tuckerton Creeks, and

Toms River, N. J.: For maintenance, \$35,000?

Mr. FREAR. Of course, Colonel, that raises the very suggestion which I made a while ago of connecting some of the items in the last group. Cold Spring Inlet has had pretty large appropriations. It is what has been termed by some people on the floor as a real estate project, and is one where a Cape May company gave a million dollars. That was not in the bill before. But we had \$60,000. I think, in 1916—July 1, \$20,000, and July 27, \$40,000—\$60,000 for Cold Spring. The same thing is practically true of Toms River. It is a place provided to help the men down there with private yachts: that is, the engineer's report states that.

Now, how can these items be questioned over here or on the floor

when they are grouped together in this way?

Col. Newcomer. Of course, you have the information about them

in the annual report.

Mr. Frear. But now the engineers will make whatever allotment they choose; \$60,000 was given last year to Cold Spring Harbor, and now any portion can be allotted under this, notwithstanding it may be the impression of some of us that it is not a worthy project.

Absecon was given the last time \$45,000, as I recollect, and now I

see \$30,000.

Mr. Hulbert. Forty thousand. It was reduced to \$30,000 in the Senate.

Col. Newcomer. What we estimate is \$30,000 for Absecon Inlet and \$5,000 for Tuckerton Creek. Those are the only ones requiring additional funds for maintenance. We simply grouped those because those are improvements on the coast of New Jersey which would

naturally go into one group.

Mr. Hulbert. This gets back to the proposition that if a majority of the members of this committee were opposed to any appropriation whatever for the maintenance of Cold Spring Inlet, but nothing was said about it in the committee because at the time the appropriation was considered it was expected the money would be used for Absecon Inlet and Tems River, and you found, as a matter of fact, you could get along with \$20,000 on those two projects and had \$15,000 left over, then the committee would not be able to exercise any supervision over that appropriation or allotment of that appropriation, or any part of it, to Cold Spring?

Col. Newcomer. I would say to simply cut out Cold Spring.

Mr. Hulbert. Strike it out here? Col. Newcomer. Yes; strike it out.

Mr. Costello. As a matter of fact, Absecon Inlet is a channel there from the ocean into Reeds Bay, which is kept open by a Government plant which costs practically this amount of money to maintain and operate for a fiscal year. We gave \$45,000 last year and practically \$45,000 was the appropriation before that. It is a way from the ocean in to Roods Bay back of Atlantic City, where the fishermen and yachtsmen who go in from the ocean use it as a rendezvous, and that is practically what it amounts to.

Col. Newcomer. We have a demand for it particularly at this time because it provides a place of safety for so many sailing and patrol boats, and in addition, with reference to this project, the Government adopted the program of opening that inlet and maintaining it for a period of five years, with the idea of determining, at the end of the five years, whether the improvement should be continued.

of the five years, whether the improvement should be continued.

Mr. Costello. I do not know whether you are acquainted with the matter I am going to speak of; but when the Atlantic Squadron held its practice test last year they did it in the neighborhood of Cold Spring Inlet. The inlet and back bay form a safe harbor, and they established their base there for the submarines and torpedo boats and torpedo destroyers, the larger battleships and cruisers lying out in the ocean. And I am credibly informed that the United States Government has contracted to spend a very large sum of money for the purpose of purchasing ground, if they have not already done so, for an aviation field here and also for a place where they are going to build vast storage plants for gasoline. So that with these features, Cold Spring Inlet is not such a project that, if there was any money provided for it in here, would require condemnation.

Mr. Frear. The channel is about 200 feet wide and has an average depth of 18 feet, so that it could not accommodate the large vessels.

The CHAIRMAN. Just to correct Mr. Hulbert—he did not intend to say so, but he included Toms River as one of the projects for which an estimate had been given. There is no estimate for Toms River, but you had in mind Tuckerton Creek?

Mr. Hulbert. Toms River is included in the group.

The CHAIRMAN. Yes; but no estimate is made for it. Mr. Hulbert. It had an appropriation in the last bill.

The CHAIRMAN. No; no estimate was made for Toms River. Of course, when we come to considered these items-

Mr. Frear. I am not criticizing that, except to raise this question

in regard to grouping. That is my purpose.

The Chairman. The next item: Cooper, Salem, Cohansey, and Maurice Rivers, Woodbury, Mantua, Raccoon, Oldmans, and Alloway Creeks. New Jersey: For maintenance, \$23,000; continuing improvement and for maintenance of Maurice River. \$25,000: in all.

Mr. Frear. What is the particular purpose of that last item.

Colonel?

Col. Newcomer. That is one of those streams of the Delaware River or tributary to the Delaware River where they have an agricultural community with very poor transportation facilities aside from the water, and it is very desirable to give them improved facilities. It is a case where the improvement has been under way, and they need some work in order to give them an effective outlet.

Mr. Frear. Is it considered important?

Col. Newcomer. It is; yes, sir. Because most of those streams along there have been improved and it is only a question of maintenance. This one is really a project adopted a few years ago, and the work of providing a channel is still in progress.

Mr. Frear. That is all to be expended for the Maurice River, that

\$25,000?

Col. Newcomer. \$25,000 goes to the Maurice River.

The CHAIRMAN. Pittsburg Harbor, Pa.: For maintenance, \$5,000. For Schuylkill River, Pa.: For improvement in accordance with the report submitted in House Document No. 1270, Sixty-fourth Congress, first session, and subject to the conditions set forth in said document, \$300,000.

Mr. Frear. I wonder if Mr. Costello can tell us anything about

that.

Mr. Costello. We had this thrashed out pretty thoroughly at the last session.

The Charman. Perhaps you would like to hear from Col. Newcomer on that?

Mr. Frear. Yes; there was some question raised about it.

Mr. Costello. We decided that it was the duty of the Government, as about one-third of the value of the shipping in Philadelphia was on this river. And this, I might say, was the first money I think the Government has every expended on it. The additional depth is made necessary by the additional draft of the tankers that bring the oil from Texas and Mexico, and down around there.

Col. Newcomer. There are three main items in favor of this improvement. One is to give an increased depth to the navy yard and the others are the big grain elevators and then the oil. Those

are the three elements that are really of special importance.

Mr. Hulbert. I do not think anybody who has ever seen it can

doubt the necessity of the improvement.

Mr. Frear. What is your view as to the desirability for the Government or the city of Philadelphia undertaking the improvement?

Col. Newcomer. I consider this would clearly come under the policy of the Government spending money on an improvement of that kind.

Mr. Kennedy. What is the condition?

Col. Newcomer. The interest there is a very general one. The community has contributed very substantially and will contribute for this improvement by reason of the building of bulkheads—

Mr. Kennedy. What is the condition attached? Col. Newcomer. There are the bulkheads.

Mr. Costello. The city government has spent about \$15,000,000 bulkheading in order to keep the waste land from washing into the river.

The CHAIRMAN. And by dredging up to the bulkheads? Col. Newcomer. And by dredging up to the bulkheads.

The CHAIRMAN. Delaware River, Pa., N. J., and Del.: Continuing improvement and for maintenance from Allegheny Avenue, Philadelphia, to the sea, \$1,870,000; for maintenance of improvement from Allegheny Avenue, Philadelphia, to Lalor Street, Trenton, \$40,000 in all, \$1,910,000.

Mr. Booher. That is not as much as it was in the bill last year.

Col. Newcomer. It is the same as in the bill before, with the exception of the item of \$90,000, which has been cut out because other provision has been made for the work at Trenton.

The CHAIRMAN. The item above Lalor Street in the last bill has

been omitted. Why was that cut out?

Col. Newcomer. Because we made other provision for that work.

Mr. Frear. What provision?

Col. Newcomer. We made an allotment from the lump sum appropriation of 1915. We found this work was requiring more money than we anticipated. We found rock removal which was not expected. In fact, the department had reported the amount appropriated was sufficient, but in encountering this rock we could not do it, and then we put in an additional estimate for \$90,000 last year. But as that work ought to go ahead without waiting the action of Congress, on account of the terminal work the city of Trenton is engaging in there, and in order to give access for the boats that had made contracts for service there, it was concluded we ought to allot from the remaining balance of the lump-sum appropriation to take care of this work

Mr. Frear. From what appropriation was that allotment made?

Col. Newcomer. The \$25,000,000 appropriation of 1915.

Mr. Frear. Is that still held by the Army Engineers to allot?

Col. Newcomer. There is a balance still remaining.

Mr. Frear. And that is used for any emergency you consider requires it?

Col. Newcomer. Yes, sir.

Mr. Frear. What is the immediate purpose of making this improvement up there? This is only a mile in length, as I remember, and very expensive—something like several dollars a square yard for excavation; that is, it is blasting rock.

Col. Newcomer. I do not know the cost in that unit, but it is quite expensive work. The city there, you know, has engaged in quite an

extensive terminal development.

Mr. Frear. That is, they bought the frontage and agreed to put up

the wharves?

Col. Newcomer. And they have projected in there and are building wharves and slips, etc. And, as I understand, they have made contracts with navigation companies for boat service. And not only is the city doing that, but also the American Bridge Co., I think, or one of the subsidiaries of the Steel Corporation, has a plant there where they are building a great many steel barges, and they are given access to this same channel.

Mr. Frear, What is the estimated cost to the Government for

making the extension above that street?

Col. Newcomer. I really do not recall. I think it was estimated at something over \$140,000, or something like that; but it has been increased by at least 60 or 70 per cent.

Mr. Frear. This does not cover all the deficit or all that will be

necessary to complete it?

Col. Newcomer. This item of \$90,000 was the amount estimated to complete it, and we have now made provision for its completion by another arrangement, out of this other fund, so that we do not expect to ask for any more money for that work.

Mr. Costello. Have you any idea what amount the corporation is

spending there?

Col. Newcomer. I do not recall.

Mr. Costello. I know there is quite a lot of activity.

Col. Newcomer. I do not recall. It is quite a large expenditure. however.

The Chairman. They have spent a large sum, and also the industrial plant there of the American Bridge Co., I think, recently completed or in process of construction?

Col. Newcomer. Yes.
The Chairman. The next item is Wilmington Harbor, Del.: For

maintenance, \$50,000.

Mr. Frear. That brings up the same point. As I remember, they have never made the contribution which they guaranteed for the Wilmington Harbor. This is on the Christiana River, and there was a condition precedent that they were to make a contribution up there. They have never made it, as I understand.

Col. Newcomer. I really do not recall. I think there was something of that kind, but that does not involve this work here. This

is providing for maintenance.

Mr. Frear. They were to put that in for maintenance.

Col. Newcomer. I would have to refresh my memory on that.

Mr. Hulbert. Page 393:

By an act of the Delaware State Legislature, passed March 9, 1901, the city of Wilmington was authorized to contribute toward the improvement of Wilmington Harbor to the amount of 10 per cent of the United States Government appropriation to an aggregate not exceeding \$60,000. To the close of the fiscal year the city of Wilmington has contributed \$30,817.11, including interest on the contribution.

Col. Newcomer. They have made some additional—I do not understand that was a condition imposed by Congress; it was a voluntarily assumed condition of local cooperation.

Mr. Hulbert. Of course, as we read this article here, the legislature of that State permitted them to do it, and there is not any question, of course, but what they were compelled to provide the legislation or they would not have done it.

Mr. Frear. They have not contributed the balance of \$30,000?

Col. Newcomer. Not yet. As I understand, they have contributed recently—within the last six months—some additional amount; I have forgotten what it is.

Mr. Frear. How could they be compelled to make up their con-

tribution?

Col. Newcomer. I do not think it is a condition that has ever been imposed by Congress, Mr. Frear. I think it is a condition, volun-

tarily assumed.

Mr. Frear. It is a matter of record they made an offer, provided the Government would go on with the improvement. That is my recollection now. And they have given \$30,000, in round numbers, and I thought you made the statement, when the bill was last considered, that they have not contributed the balance.

Col. Newcomer. They have not contributed all the sum authorized by the State to be contributed. I do not know that there is any obligation resting upon them, so far as any legal requirement is

concerned

Mr. Frear. Where would we find that?

Col. Newcomer. That is in the project document.

Mr. Costello. This is for maintaining the work already completed by the Government?

Col. Newcomer. Yes, sir.

Mr. Costello. As I understand the proposition, the city of Wilmington was to contribute a certain amount of work, if the Government would go on with this work. This \$50,000 is simply for the maintenance of that work which the Government has already completed?

Col. Newcomer. Yes, sir.

Mr. Costello. That is the idea.

The CHAIRMAN. If there is no further discussion of Wilmington Harbor, we will take up the next item. Appoquinimink, Smyrna, Leipsic, Little, St. Jones, Murderkill, Mispillion, and Broadkill Rivers, Del.: For maintenance, \$30.000.

Mr. Frear. Let me suggest, Mr. Chairman, the same objection exists to some of these that existed to some of the others. I do not care

to make a question of it at this time.

The CHAIRMAN. Most, if not all, of these have been grouped here-

tofore.

Mr. Hulbert. I understand this amount will be applied to the Appoquinimink, Smyrna, Mispillion, and Broadkill Rivers?

Col. Newcomer. Practically; yes, sir.

The CHAIRMAN. I think those are about the only ones for which estimates were made.

Col. Newcomer. Ten thousand for the Broadkill.

The Chairman. The next item:

Government iron pier in Delaware Bay near Lewes, Delaware: For maintenance and repair in accordance with the report submitted in House Document Numbered Ten hundred and fifty-nine, Sixty-fourth Congress, first session, \$68.000.

Mr. Hulbert. Colonel, what is the immediate necessity of that improvement?

Col. Newcomer. This pier is important at this time on account of the fact that we have so many of these patrol boats, torpedo boats, and other small boats which have now no good landing at Lewes. This, of course, is the Delaware Breakwater, where they are apt to collect in considerable numbers.

Mr. Frear. There is no commerce there, of course?

Col. Newcomer. There is no commerce there. The act of 1916 adopted the project for the reconstruction of this pier, or, rather its repair. It is not a reconstruction; it is taking off the planking and wooden beams and putting on a steel or concrete superstructure. Congress appropriated \$10.000 for that, and this is the balance required.

Mr. Frear. Does this complete the work on the pier?

Col. Newcomer. Yes, sir.

Mr. Kennedy. My recollection of it at that time is that it was not considered very important, but I understand from your state-

ment that it is considered important at this particular time.

Col. Newcomer. It was of a rather questionable character, so far as river and harbor work was concerned, because it is used, you understand, by the Treasury Department—the Quarantine Service, the Lighthouse Service, and the Coast Guard. So that it is important for the Government service; but a question came up as to whether river and harbor funds ought to supply it or the Treasury Department funds ought to supply it.

Mr. Kennedy. I think you are right about that.

Col. Newcomer. But in spite of that Congress adopted it as a river and harbor project, and, of course, the other is an urgency project for these other boats.

The Chairman. The next item:

Waterway between Rehoboth Bay and Delaware Bay, Delaware: Continuing improvement and maintenance, \$50,000.

Mr. Frear. What is the importance of proceeding with that at

this time. Colonel?

Col. Newcomer. That is a waterway which has been under construction for several years, along the coast down there below Lewes, and this appropriation is expected to give them an outlet. I do not think it will quite complete it, but it will at least cut through and give them an outlet for service. Considerable work has already been done.

Mr. Frear. It is a project for commerce?

Col. Newcomer. There is no through waterway there, and this is to give them a through waterway.

Mr. Costello. How much more money will it require? Col. Newcomer. I do not recall; it is not very much.

Mr. Costello. This is up the Chincoteague Bay, is it not?

Col. Newcomer. Yes, sir.

Mr. HULBERT. Is this a canal?

Col. Newcomer. It is a canal; yes—that is, partly a canal and partly waterways deepened.

Mr. Frear. How much is involved in that? You have not the

amount stated there. How much is involved in this project?

Col. Newcomer. The commerce involved? Mr. Frear. No; the cost of the improvement.

The CHAIRMAN. You mean the balance necessary after appropriating this \$50,000?

Mr. Frear. Yes.

The CHAIRMAN. It would be substantially \$65,000.

Mr. Frear. Besides this?

The CHAIRMAN. Yes.

Mr. FREAR. That will finish it?

The CHAIRMAN. Yes.

Mr. Frear. To what depth is that; 5 feet?

The CHAIRMAN. I think it is.

Mr. Frear. Do you think, Colonel, that is of any benefit commer-

cially—a 5-foot channel there?

Col. Newcomer. I think it is for local service where you are not involving the transportation of large tonnages, but where you are transporting farm produce and things like that, that a 5-foot waterway can render very efficient service. Of course, it is not a useful avenue of trade for large tonnages.

Mr. Frear. It is local rather than national?

Col. Newcomer. Yes; in a way; but it affords an outleut. Every transportation system, of course, reaches out to localities and gets elements which are involved like this. It is not a part, you might say, of a trunk line, but is a feeder.

Mr. Frear. A cost of \$56,000 is estimated, I understand? Col. Newcomer. Yes, sir; with 5 feet as the project depth.

Mr. Costello. The intent here was to furnish an outlet for that interior section of Delaware that lacks railroad facilities. There is a large farming section there that raises vast quantities of vegetables and things of that kind and where there are a great many fishermen. This means allowing them to get to the markets of Philadelphia and Camden, and through the Delaware River and Raritan Canal to New York; and it was practically for the purpose of relieving that great section there which did not have any means of transportation.

Col. Newcomer. That is right. There are some waterways along that coast that are cut off from the ocean; although there are inlets, they are not navigable, and there are a great many fishermen and

others in there who have no outlet.

The Chairman. This matter has been before the committee a number of times, and my recollection coincides with that of Mr. Costello. In the first place, they are without rail transportation, and the only method of transportation is by water. There is an agricultural and fishing section in there, and this would afford them an outlet which they do not now possess.

Mr. Frear. It is a rather expensive project, however.

The CHAIRMAN. "Waterway from Chincoteague Bay, Va., to Delaware Bay at or near Lewes, Del.: For maintenance, \$1,000."

The next item is improving inland waterway from Delaware River to Chesapeake Bay, Del. and Md., in accordance with the project recommended by the Chief of Engineers in paragraph 3 of his report dated August 9, 1913, as published in House Document No. 196, Sixty-third Congress, first session. The Secretary of War is hereby authorized to enter into negotiations for the purchase of the existing Chesapeake & Delaware Canal and all the property, rights of property, franchises, and appurtenances used or acquired for use in connection therewith or appertaining thereto; and he is further author-

ized, if in his judgment the price is reasonable and satisfactory, to make a contract for the purchase of the same, subject to future ratification and appropriation by Congress. In the event of the inability of the Secretary of War to make a satisfactory contract for the voluntary purchase of said canal and its appurtenances, he is hereby authorized and directed, through the Attorney General, to institute and to carry to completion proceedings for the condemnation of the said canal and its appurtenances, the acceptance of the award in said proceedings to be subject to the future ratification and appropriation by Congress. Such condemnation proceedings shall be instituted and conducted in, and jurisdiction of said proceedings is hereby given to, the District Court of the United States for the District of Delaware, substantially as provided in "An act to authorize condemnation of land for sites for public buildings, and for other purposes," approved August 1, 1888, and the sum of \$5,000 is hereby appropriated to pay the necessary costs thereof and expenses in connection therewith.

Mr. Kennedy. What depth is contemplated in that Document 196.

Sixty-third Congress?

Col. Newcomer. Twelve feet.

Mr. Kennedy. Does the War Department feel that is important,

from a military standpoint—a depth of 12 feet?

Col. Newcomer. It is not, of course, at all important for the movement of vessels of defense; that is, the naval vessels, for instance. The Navy Department regards nothing less than 16 feet as of any especial value for their purposes—the movement of submarines, naval boats, and things of that kind. The commercial importance of this canal between the Chesapeake Bay and Delaware River is more in this case.

Mr. Kennedy. Then, I understand, this involves more the com-

mercial proposition?

Col. Newcomer. Yes. In other words, that may be important for the movement of troops, and things like that, from the transportation side; but it is the transportation side and not strictly the defense.

Mr. Frear. In the last bill that went through the House we changed the policy entirely. That made an appropriation of \$1,300.000 for this project. It was opposed by some of us on the floor. When it reached the Senate they struck that out and put in something along the lines of what we have in this bill. Now, this authorizes the Secretary of War to enter into negotiations, and so on, and he is to estimate the value of the franchises and appurtenances to be used in connection therewith and make a contract if in his judgment it is thought best to do so; otherwise, condemnation proceedings are to be begun in the district of Delaware; that is, it is closest to this locality.

I want to ask, Colonel, if you know what was the reason for sub-

stituting this procedure?

Col. Newcomer. Because of the impossibility of ascertaining what that waterway could be bought for. In other words, there are certain private rights there that have to be quieted in order for the public to take charge of it, and there was no way, apparently, of arriving at any estimate that could be supported by evidence as to what we could get the waterway for. Different amounts have been recommended at different times as suitable amounts to be paid. The amount put in the House bill—I do not know on what it was based, I am sure; I

do not remember seeing any estimate of that particular amount. It possibly was the idea that an offer of that amount might be accepted; but this seemed to the War Department the best method of procedure; in other words, to actually get at the work—to get authority for negotiation or condemnation as the case might be-because it looks as though the condemnation would be required—would put the proposition in the most forward state.

Mr. Frear. Did the War Department or the Board of Engineers

draw this provision?

Col. Newcomer. No. I think this was prepared in the Committee of Commerce of the Senate. But, so far as the War Department is concerned, it is quite satisfactory to it as a means of attacking the problem.

Mr. Frear. What could be the franchise value of a canal like that, where the stock is worthless and the bonds were only worth 50 cents

on the dollar until this proposed purchase was introduced?

Col. Newcomer. They are paying interest on the bonds.

Mr. Frear. They may be now.

Col. Newcomer. Yes; they are paying a certain interest on the bonds.

Mr. Frear. But that is at the expense of allowing the property to

depreciate.

Mr. Dempsey. That does not mean what you suggest at all, Mr. Frear, I do not think. This is an authorization to purchase all the property, rights of property, and franchise. "Franchise" means what they have, whether it is of value or not. It may not have value, and yet, if you are going to purchase a piece of property, you should be sure to get all there is.

Mr. Frear. I was wondering what value could be fixed on a fran-

chise if the stock is worthless.

Mr. Dempsey. I do not think it has that meaning at all.

Mr. Costello. When the matter was up for consideration at the last Congress many of us held this procedure now in this bill was the proper method. Others thought there ought to be an appropriation, and we did appropriate \$1,300,000, which, in the minds of many people, would not purchase that property.

Mr. Switzer. If I recollect correctly, this is what I was championing all the way through; that is, this sort of procedure rather than an

appropriation of a million and a half or two million dollars.

The CHAIRMAN. Yes; I recollect that.

Mr. Costello. I believed this was the proper method. I still believe it. The only way we will ever be able to determine the real value of that canal will be by condemnation. I do not think the Secretary of War will succeed in naming a price that will be accepted, and if we can proceed by calling witnesses to testify as to the value we will be able to determine pretty closely what the value will be.

Mr. Dempsey. My observation as a lawyer has been that you have to pay about four times the price in a condemnation proceeding at which a piece of property could be bought at private sale. I represented a railroad company and I never in my life found a case where we could not buy a piece of property very much cheaper by private purchase than when we had to acquire it by condemnation. And I do not believe you would find a lawyer of any experience who would not tell you the same thing.

Mr. Frear. Mr. Dempsey's remark brings up that question I presented to the Colonel: Why are these proceedings brought in the State of Delaware before this particular court?

Mr. Dempsey, They have to; they only have jurisdiction. You

can not confer jurisdiction on any court, anywhere.

Mr. Frear. I do not think so. I think they have an absolute constitutional right there.

Mr. Dempser. Yes; but part of this is in the State of Delaware. Mr. Frear. That is another matter. It depends on the place where

it is located, of course.

The CHAIRMAN. I think the proposition of law Mr. Dempsev is expressing is this: That where property is situated in two States, we can confer jurisdiction on either one or the other.

Mr. Frear. Of course.

The CHAIRMAN. As to this other proposition, that we could not confer jurisdiction where none of the property existed. I think it is

probably well taken.

Mr. Frear. I should think, if you are going to put this proposition through, if you will pardon my statement, that the provision as drawn is the proper one. The only other thing you could do would be to put in an amount which would not be exceeded in the negotiations; but you understand when you place in an amount you give notice to the other side you are willing to pay that amount anyway, and there is no reason in the world why we should not trust the Secretary of War in a matter of that kind.

The Chairman. When the report comes in, we can consider it.

Mr. Frear. What is the present depth? Col. Newcomer. The present depth is 9 feet.

Mr. Frear. This would limit it to commercial purposes?

The CHAIRMAN. It does not mean to limit it to commercial purposes, because the report which has been submitted also sets forth its value for military purposes.

Mr. Frear. What other purposes could it be used for?

Col. Newcomer. Of course, it would have a value for the movement of troops and supplies.

Mr. Frear. What troops could be moved, and from where, by

means of this canal?

Col. Newcomer. You have here quite a complex situation for the defense of Philadelphia, for instance, Baltimore, and Washington. You have different avenues of approach from which the enemy might attack—different places where they might make a lodgment and you ought to have a very effective means for transferring your troops, munitions, and all supplies, which might tax a railroad, in connection with all of its other work, beyond due bounds. So that a waterway like this affords a connection between two important bodies of water, which of course have an outside route, but it is very much exposed and longer, and a short route would be a very useful element in the defense of the coast.

Mr. Frear. Do you believe, with two of the greatest trunk lines in the country between Washington and Philedalphia, able to send a hundred trains a day, if necessary, with troops, that this canal, which can only be used at the rate of 4 miles per hour under the present

regulations, could be used for the transportation of troops?

Col. Newcomer. Surely it could be.

Mr. Frear. Do you think it would be? Do you think it worth while to make this large appropriation, which, I understand, will

amount to about \$12,000,000, for that as an incident?

Col. Newcomer. Certainly, as one of the benefits. I think the movements of troops would probably not be as much as the movement of supplies. They are bulky and probably would require a considerable tonnage to handle them. Troops might be moved, of course—I do not know whether you heard Gen. Black, who testified before this committee, say that the Pennsylvania Railroad, which is one of the great trunk lines involved in this situation and also involved in the situation between Philadelphia and New York, favored a canal across New Jersey, because of the fact that they find themselves burdened with an amount of traffic that they simply can not accommodate effectively, and it wants relief.

Mr. Frear. You mean at the present time? Col. Newcomer. Yes; at the present time.

Mr. Frear. At the present time all the traffic involved only

amounts to about a million tons, doesn't it?

Col. Newcomer. Which canal are you talking about? I am talking now about the proposed canal between the Delaware River and New York Harbor, that goes through New Jersey, where we have quite a large number of trunk lines involved. I was just simply illustrating the fact that although we have rail facilities, those rail facilities are taxed to their utmost to handle the normal movement of cars.

Mr. Kennedy. The present canal is not being used to capacity?

Col. Newcomer. Probably not.

Mr. HULBERT. You have already given that matter consideration, haven't you?

Col. Newcomer. Yes, sir.

Mr. Hulbert. And in the construction of that canal you contemplate some cooperation on the part of the States of New Jersey and

Pennsylvania, don't you?

Col. Newcomer. Yes, sir. I think the Chief of Engineers recommended cooperation beyond a certain limit; in other words, that a 12-foot project should be put through there at national expense and similar in type to the barge canal.

Mr. Hulbert. Is not the State of New Jersey giving the right of

way now?

Col. Newcomer. Yes. I thought you meant toward the improve-

ment.

Mr. Hulbert. Now, why should a right of way from the State of New Jersey have been requested in the one instance and the Government purchase the right of way across the States of Delaware and Maryland in the other instance?

Col. Newcomer. In New Jersey it is simply the right of way without any actual work of improvement. Here it is buying an improve-

ment in addition to right of way.

Mr. Hulbert. Doesn't the same principle cover some part of the

existing canal across there?

Col. Newcomer. Oh, no; it is entirely different.

Mr. Kettner. Mr. Chairman, the colonel just made the statement that in the one case there was a giving of the right of way, and in the other case you were purchasing an improvement.

Have the people of Delaware and Maryland offered to give the extra right of way that is needed to enlarge this canal to meet the

requirements of the present project?

Col. Newcomer. I do not think anything of that kind has been done. Of course, as a matter of fact, you understand that the United States Government contributed to the cost of this thing originally—bought some of the bonds. So that they have already been involved, more or less, in this proposition.

Mr. Kennedy. How long do you think it would take, in case this proceeding was put through, to complete the canal to a 12-foot

depth?

Col. Newcomer. It would be a matter of certainly several years; possibly four or five years. I judge these proceedings authorized here, if they are authorized, would take fully a year. But there is

no apparent reason why they should not proceed.

Mr. Costello. Just let me straighten this out, if I can. have been various investigations made for a canal across this peninsula. The engineers of the Government, after due investigation and expenditure of many thousands of dollars, have concluded that this acquirement of the Chesapeake & Delaware Canal was the most economical plan for the Government. The Sassafras route, you remember, was estimated to cost almost double what this will cost when we carry this to its ultimate conclusion. So that all the reports and all the investigations that have gone on for many years—the net result of them all is that this is the project for the Government. Of course, the States of Maryland and Delaware could give the right of way across the Sassafras River route, and still the Government's expenditure would far exceed anything here, and it would not be as available and would make the route, I guess, a little longer. So that when you sum up a tender giving something, you have to take into consideration all the conditions surrounding it. Some one might give you something that would be very much more expensive than if you started out and paid the cost of buying it in the first place.

Mr. Kettner. I would like to have Mr. Costello's estimate of what

this canal will cost.

Mr. Costello. The engineers' estimate—I am not an engineer and have never made one myself—is that when the project is carried out to its ultimate conclusion it will cost about \$20,000,000. That is a tide-water canal.

Mr. Kettner. Of what depth? Mr. Costello. I think 16 or 18 feet.

The Chairman. Gentlemen, you are speaking from memory now.

The reports are available.

Mr. Keitner. Mr. Costello misunderstood my question. What do you think a jury in Delaware would allow the owers of this canal,

under condemnation proceedings?

Mr. Costello. I was just explaining to one of our members my thought on that matter. The people of Delaware and Maryland, from my contact with them—I go through there a couple of times a year, on this canal—desire that the Government acquire it. They do not believe they have had proper treatment from the canal company, so that I believe if it goes to a condemnation proceeding, the witnesses, people who will be able to testify intelligently on this matter.

will be in a position certainly to give a fair and unbiased statement

in regard to the value of this canal.

Mr. Frear. If it were made a condition precedent that those States should furnish the canal in its present condition, with the idea that the Government should go on and improve it, in view of the fact that the Government and the States made their contribution originally, do you thing that would be in any way an unfair provision, to insist on their contribution of the canal? The reason I ask that is because Philadelphia and Baltimore people are largely the ones who have urged it as a commercial project, and I was just asking if you think

that would be an unfair condition precedent.

Col. Newcomer. I think the War Department is thoroughly in sympathy with the policy of requiring the right of way, the land rights, to be given. Of course, when you come to the question of requiring the actual work of the improvement, which has cost money to be given free of cost, that is a different proposition. I do not think it has ever been presented; I do not think any condition of that kind has ever been imposed. Of course, whether it would be judicious here to impose a condition that the States or those localities should provide this improvement in its present state, with the idea that the Government go ahead and enlarge it and make it more efficient, is a propotition the War Department has never given any special consideration.

Mr. Frear. The reason that I suggested that is because I know the Engineers have, out on the Pacific coast, required that the localities

should cooperate.

Col. Newcomer. We feel it is a good policy. I think Congress has felt it a good policy to pursue, that the localities be required to cooperate. But it is a question of how far it should go in any particular case.

Mr. Frear. That is what I am asking about this particular case:

what is your judgment in regard to that?

Col. Newcomer. I have not given any special consideration to this case. I myself think it would be a great thing if in all cases the localities could be made to contribute toward an improvement, as a certificate of their opinion of the value of that improvement. I think that would be a great thing. But whether it would be just in any particular instance, or whether it would be practicable in this instance, is a different question. It certainly would be from my point of view as to the policy a desirable thing to do, if you consider it practicable procedure. I do not know in this instance whether those States have laws enabling them to take up a proposition of that kind.

Mr. Costello. I suppose you are aware that the States of Pennsylvania, Maryland, and Delaware contributed originally to the building

of this canal?

Mr. Kettner. And the United States.

Mr. Costello. And the United States. It does not affect the State of Pennsylvania as to the amount of benefit that might be derived as much as it does the rest of the United States from the point of view of transportation, as to what Congress might do.

Mr. Hulbert. There is a line of boats running out of there now? The Chairman. We are discussing details now that do not affect

the proposition, gentlemen.

Col. Newcomer. There is this one feature about this, that you must not consider this a local matter as affecting only Delaware and Mary-

land, for the reason that all the waterways of North and South Carolina which link up with the Chesapeake Bay would have this as their outlet to the Philadelphia and New York markets; so that it is not

a matter confined to those two States.

The Chairman. I just want to make this statement to the committee: We have been discussing some details that will come up for subsequent consideration if a report for this authorization shall be made to Congress. Looking at it from its broad standpoint, this is a very important project. It has been surveyed and reports have been made a number of times, and in each instance a favorable report. And I doubt if one could read those reports in an open-minded way without agreeing with the various boards which have investigated and reported.

This particular project connects with the Delaware River one of the busiest rivers in the United States. I think that is a fair statement.

Mr. Hulbert. Is it a busier river than the East River?
The Chairman. You could hardly call that a river there.

Mr. HULBERT. Why? It has three-nearly four-times the com-

merce of the Delaware River.

The CHAIRMAN. It is not my intention to make invidious comparisons. The Delaware River, as everybody knows, is a river with a large commerce.

Mr. Hulbert. And a river which is receiving large appropriations

while the East River is not getting any.

The Charman. It has a very large commerce—local, domestic, and foreign. The Chesapeake Bay is one of the great bays in the United States, and has tributary to it Baltimore and Norfolk as well as other cities. This present canal, owned by private interests there, has only a depth of 9 feet; its locks are limited to a width of 24 feet. Barges have to be constructed to adjust themselves to those locks; and you will notice that the barges which pass through there are long and narrow. And yet, with all of those restrictions, the commerce it does now is very considerable. And if we made it a sea-level canal, as it would be according to the plan recommended by the engineers, with a depth of 12 feet, that would answer very many of the requirements of commerce and, to a limited extent, the military necessities.

I think it is so important a project that it is worthy of the consideration of this committee and worthy of the consideration of Congress.

Looking at it also from the broad standpoint, one of the very important projects of the country is the connecting of the Delaware River with New York Bay, across the State of New Jersey; and that ought to be taken up, and probably should be taken up, along with the proposition of connecting the Delaware with Chesapeake Bay. They are both very important projects commercially and from a military standpoint, and it is well worth the time of the committee to read those reports and familiarize themselves with all the conditions.

Mr. Frear. May I just make the statement, as long as the chairman has stated his view, that I have not discussed the merits of the proposition. My question to the colonel was merely for the purpose of ascertaining from what viewpoint the engineers look at it. I think I have taken this up with a free and open mind, because, naturally, I have no prejudice as regards the proposition. I have been through the canal; and I know the result of all this work will be to validate those bonds and stock and make it a going proposition for

the people who hold them. I can not understand or agree with the chairman in regard to the merits of the proposition, and I am not going to discuss that, because I do not think it proper; but I want to say there is a diverse opinion.

(The committee thereupon adjourned to to-morrow, Wednesday,

May 2, 1917, at 10 o'clock a. m.)

Committee on Rivers and Harbors, House of Representatives, Wednesday, May 2, 1917.

The committee met at 10 o'clock, a. m., Hon. John H. Small (chairman) presiding.

STATEMENT OF COL. HENRY C. NEWCOMER-Resumed.

The CHAIRMAN. Gentlemen, I will read the next item:

Baltimore Harbor and Channels, Maryland: For maintenance of Patapsco River and Channel to Baltimore, including channel of approach at York Spit, Chesapeake Bay, \$104,000; for improvement in accordance with the report submitted in House Document Numbered Seven hundred and ninety-nine, Sixty-fourth Congress, first session, and subject to the conditions set forth in said document, \$250,000; and the Secretary of War is hereby authorized to prosecute maintenance work in the inner harbor in accordance with the recommendation submitted in said document; in all, \$354,000.

Mr. Kennedy. Colonel, I take it that is a military necessity, too, is it not?

Col. Newcomer. I do not know that the military necessity here overshadows the commercial importance. Of course, you have here the question of getting the naval vessels to those coal piers and that is a particular military necessity so far as the Navy is concerned. They do get a great deal of coal there and the larger colliers require more water in the Curtis Bay Channel. Of course, the general proposition is for increased anchorage, and that is mainly a commercial proposition, but it has that military element.

The CHAIRMAN. If there are no further questions, I will read the

next item:

Rockhall, Queenstown, Claiborne, Tilghman Island, Cambridge, and Crisfield Harbors, Elk and Little Elk, Chester, Corsica, Choptank, Tuckahoe, Warwick, La Trappe, Tred Avon, Wicomico, Manokin, Big Annemessex, and Pocomoke Rivers, Slaughter, Tyaskin, and Broad Creeks, Twitch Cove and Big Thoroughfare River, and Lower Thoroughfare, Deal Island, Maryland, Nanticoke River (including Northwest Fork), Delaware and Maryland, and Broad Creek River, Delaware: For maintenance, \$15,800.

Mr. Frear. May I ask the Colonel a question here?

The CHAIRMAN. Certainly.

Mr. Frear. There are about thirty different projects named here and they are all lumped together. What is the purpose of placing

so many in this group?

Col. Newcomer. They are all on what is known as the Eastern Shore of Maryland. There are a number of small projects, none of them expensive, and it is desirable to have them all lumped together, on the same proposition I illustrated yesterday, so that the sum which is made available can be distributed as necessity arises.

Mr. Frear. But this has never been done before.

Col. Newcomer. Some of them have been grouped together be-

Mr. Frear. Yes: I have the old bill in front of me.

Col. Newcomer. The old item included quite a number of them.

Mr. Frear. But we have never had before one that included 30 items

Col. Newcomer. No: I think not.

Mr. Frear. There were 6 or 8 in the old item. I have the old bill before me, and there were 6 or 8 in the item on page 10 of the old bill.

Col. Newcomer. Yes.

Mr. Frear, My thought is this, as I said before: If we enlarge these groups in this way, it will be impossible hereafter, I take it, no matter whether a project is considered valueless or not, to ever get it out of the bill, because you are now taking so many and placing them in one group. There is nothing indicated here as to how much is to be spent on any of these projects.

Col. Newcomer. I will say, Mr. Frear, that information is furnished in the annual report—how much we expect to put at each

place.

Mr. Frear. That is done subsequent to the passage of the bill by the House.

Col. Newcomer. Oh, no; prior to passage by the House. estimate is here.

Mr. Frear. Let me ask you how much will go to Rockhall? Col. Newcomer. In this particular case?

Mr. FREAR. Yes.

The CHAIRMAN. There is nothing recommended for Rockhall.

Mr. Frear. Then why is Rockhall put in this group, unless, as you say on page 27, you can take, if you desire, any part of that amount and transfer it to Rockhall. You can do that under that general principle.

Col. Newcomer. Yes, if desirable.

Mr. Frear. Then, as I say, how can the committee determine what

amount is going to any of these projects?

Col. Newcomer. I do not know that you can determine in advance what exercise of discretion might be made by the Secretary of War and the Chief of Engineers under the authority granted by Con-That, of course, is impossible. The Chief of Engineers and the Secretary of War do not know that in advance.

Mr. Frear. So that it is practically left in the hands entirely of the

Secretary of War and the Chief of Engineers.

Col. Newcomer. I would not say entirely. Mr. FREAR. In what way are they limited?

Col. Newcomer. We report to Congress in our estimates for the year what we propose to do at each of these places, and according to the best information we have at the time that will be the thing to be done, and Congress appropriates money on that basis. That is the expected expenditure, but you give us authority, if this proposition goes through, to vary that program as the necessities of the case may develop; and the changes are reported in the next annual report, and you can constantly keep tab on us in that way. If you wish to cut out any unworthy project, which you deem unworthy, at any time,

you can leave out the names.

Mr. Frear. Rockhall is not going to get anything, so there is no object in cutting Rockhall out. Let me say that I have no reference to these particular items, but I am just trying to get at the policy, which is a pew policy presented to the committee, so we can understand it fully.

Col. Newcomer. You will understand, Mr. Frear, so far as this estimate is concerned, it is not a new policy, because you have had a

number of similar ones grouped together before.

Mr. Frear. But nothing like what you have attempted to do here. Here are 30 different projects, averaging about \$500 apiece, and you reserve to yourselves the right to change and transfer any fund you wish to any of the items under this particular group, and the committee has no knowledge of what will be done. Now, I am not questioning or impugning motives; I am simply trying to ascertain the policy. Of course, it is only \$15,000, but if it was \$150,000 the principle would be the same, of course.

Col. Newcomer. Do you not observe that the principle is exactly the same as obtained before? This is simply an extension of the

same policy we had before.

Mr. Frear. You might say that all of the projects in this River and Harbor bill be grouped together without reference to any particular locality and the same power be given you. Why should you place the limitation upon this group of 30 projects? Why not have the whole 200 projects grouped together with a lump sum?

Col. Newcomer. I would not object to having a lump sum for all

maintenance work.

Mr. Switzer. That is what you have advocated heretofore.

Mr. Frear. Yes; in trying to put a limitation on expenditures I

have done that.

Col. Newcomer. The point is we have grouped them for administrative purposes in the same geographical vicinities and under the same district officer, so that the fund provided could be in the hands, ordinarily, of one man, and he can judge best of the relative merits. Of course, we act usually upon the information furnished by him. I believe it is a more workable proposition on that basis, keeping Congress informed as to the distribution of the money, than it would be on the other basis. However, as I say, I personally would have no objection to your doing it the other way if you desired to do so.

Mr. Kennedy. That is, you would not have any objection to our

appropriating a lump sum for maintenance?

Col. Newcomer. I would not.

Mr. Costello. Colonel, there is a reduction in dollars and cents of about \$12,000 and an increase in the number of items over the bill of last year. My friend Frear over there raises the question, but I take it that Rockhall is not estimated to cost anything on this fund, and there is no amount set aside for it in your recommendation.

Col. Newcomer. Exactly.

Mr. Costello. But this money could be made available for any of these places that are set forth here if the necessity required it.

Col. Newcomer. If the contingency arises; yes.

Mr. Costello. Therefore, from the engineer's point of view, the elasticity which exists here is something that will contribute to the good of the Government?

Col. Newcomer. That is our idea.

Mr. Costello. Because you have leeway sufficient to apply it, if the necessity occurs, at any of these places.

Col. NEWCOMER. Yes, sir.

Mr. Frear. That being true, Colonel, why would it not be perfectly proper to include lines 12, 13, 14, 15, and 16, which follow, and which provide \$30,000 for the Pctomac River and other places, notwithstanding the fact that two districts would be taken in? Why would not that be perfectly proper?

Col. Newcomer. The only objection I would have particularly would be the one I have just stated. It would involve another dis-

trict.

Mr. Frear. But, if you desired, you could take it from one district and turn it over for work in another district, and that would be more convenient, would it not?

Col. Newcomer. As I said before, I personally see no objection whatever to granting a maintenance fund which would be available all over the country, if Congress desires to proceed to that limit.

The CHAIRMAN. Are there any further questions on this para-

graph?

Col. Newcomer. I think there is one statement I would like to add, Mr. Chairman, which I do not think was brought out in yesterday's discussion of the question of policy in grouping items together. It is particularly pertinent to this situation. On the Eastern Shore of Maryland there is a perfect network of waterways which is thronged with fishing craft of different kinds. The whole livelihood of the people there is bound up in the fishing industry, so that it is a matter of great importance, vet each individual case is a matter more or less insignificant as to cost. Now, we show here by this grouping of items that that whole section is being taken care of in this annual bill by this amount of \$15,800. In other words, I think it is a fairer proposition than it would be to simply put in one or two items which might be involved in this particular sum, indicating you are only taking care of one or two items. As a matter of fact, this bill this year, in appropriating the sum provided, is taking care of the annual needs of all of these places, and I think it is well enough that all those places should appear in the bill.

Mr. Frear. My criticism, Colonel, was only directed to this point: When a project apparently is unworthy to any Member of the House, they are unable to point out why it should be dropped because no specific amount is set aside for that project. You say the engineer has determined what he will allow, but the engineer may not have determined to allow anything, and under the provision which is contained on page 27, he may allot the whole amount to that project, if he sees fit, so that the difficulty is that we can not determine anything about the amount of money that is supposed to go to these projects,

if any at all

Col. Newcomer. But you can, Mr. Frear. That is just the point I made before. You can determine just as you did before exactly what is proposed to be expended there, because that is all given in

the annual estimates. The annual estimates show which one of these items is involved, and by going to that source of information you can tell what we propose to expend, although you do give us the

discretion to vary that.

Mr. Frear. Let me ask this question to make sure whether I am right about it and that we understand each other. You have here in this item \$15,800. In the old bill you had \$27,100, which is about \$12,000 more, for a smaller number of items, and that was based upon your report, so that this \$15,800 is only a small portion of what you have recommended as necessary for these items in your report, is it not?

**Col. Newcomer. We have cut out certain items here which were for the improvement of the Wicomico River and the Big Annemessex River. This item of \$15,800 is the sum of the items reported for maintenance on page 12 of your book. I think I can pick out from the bill the number. For instance, there was for maintenance before

a group of 12 items-

Mr. Frear. Yes; I understand that. There are about 29 or 30 in

the present group.

Col. Newcomer (continuing). And the amount for maintenance in that group was \$10,000. Then we have added in other items; for instance, Lower Thoroughfare has an item of \$3,000, and Corsica River, Md., \$2,800. That shows just which items are included. The 12 items which were in before took \$10,000, the Lower Thoroughfare \$3,000, and the Corsica River \$2,800.

Mr. Frear. On page 12 there is \$14,800 for the group of items in Maryland, and \$3,000, as you say, for Lower Thoroughfare, which makes \$17,800; then \$2,800 for Corsica River, which would be \$20,000. Now, we find on page 8 of this bill \$15,800, so that the two do not

correspond, necessarily.

Col. Newcomer. The amount for the group in the book prepared for the committee which footed up \$14,800 was cut down by the committee to \$10,000. The committee did not allow the amount estimated. They allowed \$10,000 for that.

Mr. Hulbert. And you have added to that two items, one of \$3,000

and one of \$2,800, which makes the \$15,800?

Col. Newcomer. Yes.

Mr. Kennedy. Of course, that reduction was brought about by the fact that the committee thought the maintenance charge too heavy at

those places for the very small commerce.

Col. Newcomer. I do not recall now, Mr. Kennedy, the details of that transaction. I, of course, was with the committee before when they made that reduction, and it may have been made at my suggestion, upon later information, I do not know; but it was made by the committee as a result of the information furnished them.

Mr. Kennedy. We cut out a few items because we thought the maintenance charge was entirely too heavy for the commerce carried

by the stream.

Col. Newcomer. Yes; you reduced the amount \$4,800 at that time, and of course the same thing may occur in the future. In other words, when a representative of the Office of the Chief of Engineers appears before the committee which is preparing the bill, he comes, of course, with information which is usually six months later than the estimate in the annual report, and that may, in some instances,

modify the estimate. I know in some cases the committee has reduced the amount without any additional information. They have simply exercised their discretion in the matter and allotted a different sum.

Mr. Kennedy. Colonel, in case the committee wanted to cut out some item, all it would have to do would be to strike the item out of the bill and the maintenance appropriation would not apply to it?

Col. Newcomer. Yes; that would accomplish that purpose.

The CHAIRMAN. Colonel, assuming that this paragraph as it is written here should be favorably reported and became a law, and you came to administer it in the War Department, how would you

administer or expend this fund?

Col. Newcomer. We would primarily, of course, make a distribution of it in accordance with the estimates, if those estimates had been approved, on the basis that that represents the needs as known at the time. Now, if a different situation should develop, and we find we need more at one place and less at another, or that we needed something where before we anticipated the need of nothing, we can allot it in case of need, if the fund is sufficient for the purpose. And not only does it have that advantage—I do not know that it is necessary to go into this because it was gone into yesterday.

The CHAIRMAN. There is no reason why it should not be repeated. I have just one other question. Each one of these items in this paragraph for which a gross sum is appropriated for maintenance has

been heretofore under improvement by the United States?

Col. Newcomer. Oh, yes.

The CHAIRMAN. So that we are not taking in any project which has

not been heretofore improved by authority of Congress?

Col. Newcomer. No, sir. In this item as it passed the House and as it was introduced in the Senate there were two items for additional improvements which have been cut out as deemed not essential at this time.

Mr. Treadway. How much inconvenience has the board experienced under the old system of practically allotting maintenance items for each individual item rather than under the group system

which you are now advocating?

Col. Newcomer. I do not know that it has made any essential difference to the board at all. We have had in before a number of group items. You will see them all through the book here, and I do not know that it has made any difference. It is a matter for the committee to say whether it has embarrassed them in any way whatever because the amounts proposed for these items are set forth, and it is simply a question of enacting it in group form instead of the other form.

Mr. Hulbert. Mr. Chairman, if I may, I would like to ask one question for general information. In this paragraph there are 29 or 30 items. Suppose the committee should determine against this policy of grouping all these items, then in order to get at the amount which we should allow for maintenance would we go back to the items of the old bill?

Col. Newcomer. We have simply taken the items in the old bill

and grouped them, so that would be the procedure.

The Chairman. In the last bill we grouped 12 of them, as you will find on page 12 of your book.

Col. Newcomer. Yes.

The CHAIRMAN. If there are no further questions, we will proceed with the next item:

Potomac River, at Washington, District of Columbia, at Alexandria, Virginia, and at Lower Cedar Point, Maryland. Anacostia River. District of Columbia, Occoquan, Aquia, Upper Machodoc, and Nomini Creeks, Virginia: For maintenance, \$30,000.

Mr. Switzer. This does not include the channel at Newport News? Col. Newcomer. No, sir.

The CHAIRMAN. If there are no further questions, we will proceed with the next item:

Norfolk Harbor and channels, Virginia: For improvement, including channel to Newport News, in accordance with the report submitted in House Document Numbered Six hundred and five, Sixty-third Congress, second session, \$360,000. The unexpended balance of appropriations heretofore made for improvement of channel to Norfolk, Virginia, is hereby made available for continuing improvement of said channel in accordance with the report submitted in said document.

Mr. TREADWAY. What is the object of that?

Col. Newcomer. This is a new improvement which was inserted in the bill before by the House, and the main provision provides for widening the channel from 400 feet to 600 feet, both to Newport News and into the Norfolk Harbor. The 400-foot channel is a pretty contracted channel for the movement of the big ships, and moreover it is encroached on more or less by a great many small craft which anchor there, and this also provides for certain anchorage ground.

Mr. Treadway. Is it not the law or the usual method that an unexpended balance is available for continuing the same work for which

it was originally appropriated?

Col. Newcomer. But this makes it available for new work. If it is appropriated for a 400-foot channel, it can not be applied in constructing a 600-foot channel. This makes the unexpended balances available for this new work.

The CHAIRMAN. For a new project?

Col. NEWCOMER. Yes, sir.

The CHAIRMAN. This widening of the channel at Norfolk to which you have referred is in reality the widening of the southern branch to the navy yard, is it not?

Col. Newcomer. It is that, and also the channel to Newport News.

Mr. HULBERT. Is that a straight channel or a curved channel?

Col. Newcomer. It is curved, more or less.

Mr. Hulbert. Is it because of the difficulty that you will have in moving the larger vessels at the turn that you are increasing the width of the channel from 400 to 600 feet?

Col. Newcomer. No, sir; we are making the channel regularly 600 feet, and, of course, there will be some increased width at the turns.

Mr. Costello. I understood you to say that the part relating to Newport News was based upon the recommendation of the Navy Department, and was due to the contracted conditions there when they are launching ships.

Col. Newcomer. That particular phase of it has not been brought

to my attention.

Mr. Costello. I understood that they had a pretty contracted condition there.

Col. Newcomer. Possibly.

Mr. Costello. Then, this entire appropriation is based upon

commercial advantage.

Col. Newcomer. In this case, of course, there is an important military aspect because of the navy yard at Norfolk and the use of the channel for naval vessels. They have, as a matter of fact, asked for 40 feet there, but they have not asked for any specific width. They say that 750 feet, of course, would be the preferable minimum width, but they would like to have it up to 1,000 feet. As a matter of fact, we can not give the Norfolk Navy Yard channel that width because of the land situation and because of the structures on the land there, but we can give the channel proposed here.

Mr. Dempsey. How much is the unexpended balance.

Col. Newcomer. My impression is that it is something like \$100,000.

Mr. Brooker (the clerk). It is \$60,000.

The CHARMAN. Are there any further questions on this item?

Mr. HULBERT. I have one other question. They will take the same size or draft of vessels through this channel at Newport News that they would take through Hell Gate when it is improved?

Col. Newcomer. I think so.

Mr. Hulbert. You say that a channel 500 feet wide at Hell Gate

would suffice for the present needs?

Col. Newcomer. I say that that is the channel that we can get quickest. We have at Norfolk now a 400-foot channel which is accommodating these boats in a way, but it is not adequate. A 500-foot channel through Hell Gate is not adequate, either, but it is the first provision toward an adequate channel.

Mr. HULBERT. Then it will require the adoption of another

project in order to increase it.

Col. Newcomer. No, sir; you can increase it by completing the project in the bill. This project provides for the full size channel.

Mr. Hulbert. How wide is it to be? Col. Newcomer. I think about 900 feet.

Mr. HULBERT. That is the maximum under the project?

Col. Newcomer. It is usually 1,000 feet through East River. If we adopt this project through East River the channel will be generally 1,000 feet, but we do not get that much through Hell Gate on account of the rocks.

Mr. HULBERT. What would be the maximum width that you could get through Hell Gate under the project which we have in the bill

S woo

Col. Newcomer. Do you mean authorized by the project or with the money provided?

Mr. HULBERT. I mean authorized by the project.

Col. Newcomer. I will have to look that up and tell you, but my impression is that it will be about 650 feet at Hell Gate. It varies somewhat at different places on account of local conditions, but that is the project.

The Chairman. Without objection, Mr. Hulbert may recur to that matter to-morrow morning, and in the meantime Col. Newcomer can

inform himself about the details.

The next item is—

Rappahannock, Mattaponi, and Pannunkey Rivers, Urbana Creek, and Milford Haven Harbor, Va.: For maintenance, \$15,000.

Mr. Hulbert. Is all of that amount necessary?

Col. Newcomer. Yes, sir; we think that amount is necessary. Of course, it is like any other estimate for maintenance in that it is based upon our best information.

The CHAIRMAN. The next item is—

James, Nansemond, Pagan, and Appomattox Rivers, Va.: For maintenance, \$26,000; continuing improvement of James River, \$46,000; in all, \$72,000.

Mr. Kennedy. I would like to ask a question in regard to the James River item.

The CHAIRMAN. Certainly.

Mr. Kennedy. As I understand it, there is a modification of that James River project recommended in the report, is there not?

Col. Newcomer. Yes, sir.

Mr. Kennedy. But this sum recommended now, as I understand it, is the same that appears in the bill that was prepared last winter to

continue on the old project?

Col. Newcomer. It continues, of course, under the old project, but it does not contemplate any work beyond what is included in the recommended modification. In other words, the recommended modification simply reduces the project depth from 22 feet to 18 feet, and all the work has been confined practically to a depth of 18 feet. We have gone through at that depth, and the money that it is proposed to expend here is to be used within that limit. You will recall that the work recommended involved a further expenditure of something like \$500,000.

Mr. Kennedy. That is for an 18-foot channel and the cutting out

of curves?

Col. Newcomer. Yes, sir; that is the first work needed, and it will be the first work done.

Mr. Kennedy. This work that is contemplated here would be done within the new project that has been recommended?

Col. Newcomer. Yes, sir.

Mr. HULBERT. Since you were here last February, has there been any application made, so far as you know, to the board of review for a reconsideration of the modification of that project from 22 feet to 18 feet?

Col. Newcomer. It has not gone back to the board.

The Chairman. In the last bill, the committee gave considerable attention to the completion of a diversion channel or dam at Petersburg?

Col. Newcomer. Yes, sir.

The Chairman. One of the Representatives from Virginia, Judge Watson, I believe, was before the committee, and provision was made for that. Now, that is not included in the present estimate.

Col. Newcomer. No, sir; it is not.

The CHAIRMAN. For what reason did you omit that?

Col. Newcomer. We did not consider that it was an item that was particularly urgent. This matter is simply waiting there, and has been waiting for four years for the locality to do some work which they have not done, and we did not feel that it was incumbent upon the United States to consider that as an emergency measure.

The Chairman. Is the work which was to be done under local cooperation such work as must be done at the same time that the Gov-

ernment work is done?

Col. Newcomer. It has to precede it.

The CHAIRMAN. And they have not yet done their local work?

Col. Newcomer. I understand that they have made provision for

doing it, but it has not been actually accomplished.

The CHAIRMAN. Suppose they should do their part of the work under local cooperation, as may be required, and a number of months should elapse, say, 6 menths or 12 months, before the Government does its work. In the meantime, by reason of the delay, would any deterioration result in the work that they might have done?

Col. Newcomer. No, sir; it would not affect their work. The Chairman. I am only asking these questions in order to make

it clear to the Virginia Representatives.

Col. Newcomer. The completion of the diversion dam is necessary simply to make easier the maintenance of the channel in front of Petersburg. The diversion dam there has not been completed, because the local work that was required to be done had to precede the Government work. It simply means that the channel would be subject to the deterioration that it has been subject to for a number of years, and that it would require more for maintenance. It is desirable to complete the diversion dam as soon as the other work is done, but it is not regarded as especially urgent.

The CHAIRMAN. The next item is-

Blackwater River, Virginia, Meherrin and Roanoke Rivers, and Newbegun Creek, North Carolina: For maintenance, \$2,500.

Col. Newcomer. Newbegun Creek should be stricken out. It was left in there by error. In the last Congress there was inserted an item for the improvement of Newbegun Creek, and in striking out the amount we neglected to strike out the name, and the name should be stricken out. Of course there is nothing appropriated for it.

The CHAIRMAN. The improvement of that creek is omitted from

these recommendations?

Col. Newcomer. Yes, sir.
The Chairman. The next item is—

Waterway from Norfolk, Virginia, to Beaufort Inlet, North Carolina: Continuing improvement, \$100,000: Provided, That the route of the waterway may, in the discretion of the Secretary of War, be modified in accordance with the report submitted in House Document Numbered Fourteen hundred and seventyeight. Sixty-third Congress, third session: And provided further, That not more than \$75.000 shall be expended in acquiring the necessary rights of way between Albemarle Sound and Pungo River.

Mr. Frear. What has been done in regard to the land required for right of way? About 800 acres was required, and the question came up whether local contributions for the land would be secured. What is the status of that now? I notice this provision that not more than \$75,000 shall be expended in acquiring the necessary rights

of wav between Albemarle Sound and Pungo River.

Col. Newcomer. We have not received any report from the district officer. Of course, we have not been authorized yet to proceed toward acquiring any land, because we have been waiting for this However, I have just been informed that there is a prospect—in fact, Mr. Small told me that he had information indicating that there is a prospect of getting this land at a very low price, as low as \$3 per acre, which is below the estimate made.

Mr. Frear. Then, is that large amount of \$75,000 necessary, do

you think?

Col. Newcomer. The amount estimated before, I think, was \$150,000 for right of way, but that was cut in half by the committee because they thought the other amount was too great. I am not in a position really to give you precise information as to whether \$75,000 is required for that purpose or not. We had, at first, left out this item, but concluded that there was some question as to whether the appropriation which we had unexpended would be sufficient to finish the waterway between Norfolk and Albemarle Sound. It is necessary to go through there in order to reach the connecting waterways to Pamlico Sound. We have funds already provided that were expected to complete that, but there is some question as to whether they will be sufficient on account of the general increase in prices and in the cost of work. The \$100,000 now proposed will insure the completion of that section, and we think will be sufficient to acquire the right of way for the other.

Mr. Frear. How much have you now on hand of that appro-

priation?

Col. Newcomer. Mr. Brooker can probably give you that amount.

Mr. Brooker (the clerk). The available balance is \$172,000.

Col. Newcomer. We have made contracts covering a large part of that appropriation, and this available balance of \$172,000 is for the operation of the Government plant. We are doing that work both by contract and by Government plant.

Mr. Frear. What is the change proposed here? I have an indis-

tinct recollection of this House Document No. 1478.

Col. Newcomer. The original plan adopted by Congress; that is, the existing project, provides for a channel through Alligator River to Rose Bay, while the revised route goes through Alligator River to Pungo River and Pamlico Bay.

Mr. Frear. That has not been determined at this time?

Col. Newcomer. That modification has not yet been approved. Mr. Hulbert. Does this modification abandon any right of way that has been already acquired?

Col. Newcomer. No. sir.

Mr. Hulbert. Will \$75,000 cover all the right of way that has to be acquired?

Col. Newcomer. It is to be expected that it will, from the best in-

formation, but we do not know positively.

Mr. Dupré. As I recall the bill last year, there was appropriated \$1,000,000 for continuing the improvement?

Col. Newcomer. Yes, sir.

Mr. Dupré. And you have reduced that to \$100,000?

Mr. Newcomer. Yes, sir. Mr. Dupré. Why?

Col. Newcomer. It was expected that the work would proceed vigorously upon the acquisition of the right of way, which was expected to take six or seven months. It was then expected to go ahead with the construction of the route, but this provision omits any actual work of construction. We estimate that this will probably be sufficient to finish the other link and to acquire the right of way. When we go into Albemarle Sound from Norfolk by the link now approaching completion we can have access to Pamlico

Sound through Croaton Sound, with a depth of between 9 and 10 feet, which, of course, will give a means of communication. In fact, that is the route now followed by the commerce that originates on Pamlico Sound and that comes north to Chesapeake Bav.

Mr. Durré. In other words, the department has pared that rec-

ommendation down to \$100,000?

Col. Newcomer. That is because of the emergency situation and because this is an emergency bill.

The CHAIRMAN. The next item is:

Manteo and Thoroughfare Bays, Scuppernong, Pamlico, Tar, South, Bay, Neuse, and Trent Rivers, Fishing, Contentnia, Swift, and Smith Creeks, and waterway connecting Swan Quarter Bay with Deep Bay, North Carolina: For maintenance, \$15.500.

Mr. Frear. That is the first case where they have been grouped together?

Col. Newcomer. Yes, sir; I believe so. The Chairman. The next item is:

Beaufort and Morehead City Harbors, waterway from Pamlico Sound to Beaufort Inlet, waterway connecting Core Sound and Beaufort Harbor, inland waterway, Beaufort to Jacksonville, and Beaufort Inlet, North Carolina: For maintenance, \$35,500; and the unexpended balances of appropriations hereto-fore made for New River, North Carolina, are hereby made available for the improvement of the inland waterway, Beaufort to Jacksonville, in accordance with the report submitted in House Document Numbered seventeen hundred and seventy-five. Sixty-fourth Congress, second session.

Mr. Hulbert, Is that route from Beaufort to Jacksonville a newproject?

Col. Newcomer. No, sir; it is a new name for an old route.

Mr. Hulbert. It was not in the bill that we passed last February. was it?

Col. Newcomer. No. sir.

Mr. HULBERT. Why do you put it in this bill?

Col. Newcomer. It was put in by the Senate. It was in the Senate bill as introduced in the Senate by the Senate Committee on

Mr. Hulbert. In other words, in making up this bill, have you adopted the plan of taking in the items that were added by the Senate to the bill that was made up by this committee last February?

Col. Newcomer. We adopted the policy of taking the Senate bill as the basis for consideration in preparing this emergency bill. This item that is introduced here is simply a proposition to recognize an existing situation there. There is a project for the New River which provides an outlet to the Atlantic Ocean for traffic going around to Wilmington, but, as a matter of fact, the inlet can not be maintained, and the New River traffic has gone north to Morehead City and Beaufort through this inland waterway that lies between Beaufort and Jacksonville, and the proposition now is simply to make the money appropriated for New River available for this better connection by this inland waterway.

Mr. Hulbert. What was the former name of this improvement?

You say that this is an old improvement under a new name?

Col. Newcomer. It was in three sections before. You will find it. on page 574 of the report. Item A appears on page 574 under the head of "New River"; on page 576 you will find item B, "Waterway

between New River and Swansboro," and on page 578 you will find item C, "Waterway between Beaufort Harbor and New River, North Carolina (i. e., portion between Beaufort and Swansboro)." Those are the three different items in that one route.

Mr. Hulbert. I want to call your attention to this statement under

the subhead "(A) New River," on page 575:

It is not proposed to prosecute the existing project actively, as the funds on hand are believed to be inadequate. No estimate for additional appropriation is submitted.

Under the subhead "(B) Waterway between New River and Swansboro," on page 577, this statement appears:

The funds available June 30, 1916, will be exhausted about December 30, 1918. It is proposed to apply the funds on hand to purchase of equipment for U. S. Dredge *Croatan* and maintenance of the channel by dredging with United States plant and hired labor during October, November, and December of 1916, 1917, and 1918.

Then, under subhead "(C) Waterway between Beaufort Harbor and New River, North Carolina," etc., on page 579, this statement appears:

It is proposed to apply the funds on hand to purchase equipment for the U. S. Dredge *Croatan* and maintenance of the project by dredging with United States plant and hired labor during January, February, and March of 1917 and 1918.

Now, what is the particular urgency of this work, in accordance with the report submitted in House Document No. 1775, Sixty-fourth

Congress, second session, at this time?

Col. Newcomer. That will not involve any additional appropriation. As I have stated, there is now a route leading from Jackson-ville on the New River through the New River inlet to the ocean, and there is a balance of between \$6,000 and \$7,000 on that project, which is not sufficient for carrying out that project and giving the proposed depth to that inlet. We have a channel there 250 feet wide and 5 feet deep. Now, it is found that that channel can not be provided from the funds available. Moreover, since that project was adopted the traffic no longer attempts to pass through that inlet out through the ocean to Wilmington, but it goes through that inland waterway to Morehead Harbor and Beaufort, and we want to get a better connection between New River and that inland waterway. We can accomplish that connection with the funds now on hand for New River, but which are inadequate for carrying out the other project, and, in fact, that other project should not be carried out.

Mr. Hulbert. What items in this bill that passed the House last February and not carried in this proposed bill, make up that \$35,500?

Col. Newcomer. The item for Beaufort Harbor—

Mr. Hulbert. That was \$4,500.

Col. Newcomer. Beaufort Harbor, for maintenance, \$4,500; Beaufort Inlet, for maintenance, \$14,000; and Morehead City Harbor, for maintenance, \$2,000. Then the item for the waterway from Pamlico Sound to Beaufort Inlet was \$14,000, I think.

Mr. Hulbert. That makes up the \$35,500.

Col. Newcomer. The waterway between Beaufort and Jacksonville has the smallest project depth of any waterway in the United States. Mr. Hulbert. What is the depth?

Col. Newcomer. In a part of the waterway it is from 3 to 4 feet at high water.

Mr. HULBERT. How much is it at low water?

Col. Newcomer. It has a range of from 1 to 3 feet. It is just for small boats. In a part of the waterway, of course, there is a greater depth. There is a greater depth as you pass through the sound. But they have found that with this waterway, small as it is, they can get through and accommodate the modest commerce there, which, I think, is from 20,000 to 30,000 tons.

Mr. HULBERT. Is that the project depth?

Col. Newcomer. A part of it is 3 feet at low water, and a part of

it is 4 feet at high water. It is only for small craft.

Mr. Dupré. As I understand it, in these matters of maintenance you have practically the same amounts that were recommended and approved in last year's bill.

Col. Newcomer. The same amount that was approved.

Mr. Dupré. Not only in this item, but as a general proposition?

Col. Newcomer. In all cases.

Mr. Dupré. Where there is a bunching, so to speak, of various projects, the total sum is simply the sum of the different items that were provided for in a separate way?

Col. Newcomer. Yes, sir.

Mr. Hulbert. You say that is true in all cases, but by that you mean in all cases where the estimates were retained in the bill?

Col. Newcomer. We have retained all of the maintenance items.

Mr. Hulbert. You did not retain the maintenance estimate for the
Harlem River.

Col. Newcomer. That was for improvement, not for maintenance.

Mr. Hulbert. It was for continuing improvement.

Col., Newcomer. Yes, sir; but that is a different proposition.

The CHAIRMAN. Mr. Frear, you wanted to ask Col. Newcomer about this item a while ago.

Mr. Frear. I think it was just about the amount on hand, and I

believe Col. Newcomer has stated it already.

The Chairman. I think he said it was between \$6.000 and \$7,000. Mr. Hulbert. How much of the unexpended balance under this project is available for the improvement of that inland waterway?

You distinguish that from maintenance, do you not?

Col. Newcomer. Yes, sir; it is a new project and it involves a new appropriation. It is simply a better use of the money on hand, and I think it is advisable to use it that way.

The CHAIRMAN. The next item is:

Northeast, Black, and Cape Fear Rivers, N. C.: For maintenance, \$85,000; completing improvement of Cape Fear River below Wilmington, \$35,000; in all, \$120,000.

Mr. HULBERT. What is the particular urgency of this item at this time? Is it for commerce or is it connected with the national defense?

Col. Newcomer. Wilmington Harbor, of course, is a very important outlet for commerce, particularly with reference to fertilizers in this case. Fertilizer is the heavy item of commerce on that river, and it is very desirable, of course, to make this improvement.

The Chairman. If there are no other questions, we will pass to the next item:

Charleston Harbor and Channels, South Carolina: For maintenance, \$40,000′; for improvement in accordance with the report submitted in House Document Numbered Two hundred and eighty-eight, Sixty-second Congress, second session, and subject to the conditions set forth in said document, \$70,000; for maintenance of Ashley River Channel, \$10,000; in all, \$120,000.

Mr. Frear. May I ask a question with regard to the item we have just passed? I have been trying to ascertain about this item of \$85,000 for maintenance of the Northeast, Black, and Cape Fear Rivers. There is nothing in the other bill which is clear to me. There was an item of \$115,000 in the other bill, but why is this amount of \$85,000 left in the bill for maintenance of the Northeast, Black, and Cape Fear Rivers, lines 10, 11, and 12 of page 10 of the bill?

Col. Newcomer. The bill as passed by the House carried an item for Cape Fear River, at and below Wilmington, for completing the improvement and for maintenance, of \$115,000. As a matter of fact, of that amount \$35,000 was for continuing or completing the improvement and the other was for maintenance, and we have simply

separated it here.

Mr. Frear. That included the two items, then?

Col. Newcomer. Yes.

Mr. Hulbert. The other item included the maintenance and the improvement both?

Col. Newcomer. Yes; before the projects were grouped together. The Chairman. If there are no further questions, we will proceed with the next item:

Winyah Bay, Waccamaw, Little Peedee, and Great Peedee Rivers, South Carolina: For maintenance, \$70,000.

Mr. Frear. That has been cut from over \$80,000.

Col. Newcomer. Yes.

Mr. Frear. Was not the other for the improvement of the Winyah

Bay project?

Col. Newcomer. We left in the item for maintenance of Winyah Bay and cut out the item for the improvement there. We have the channel at project depth, and the additional work proposed is the construction of a training wall in order to reduce the expense of maintenance. We thought that the \$80,000 might for the time being be left out.

Mr. Frear. What is the item for maintenance for Winyah Bay, if

I may ask?

Col. Newcomer. \$65,000.

The CHAIRMAN. If there are no further questions, we will pass to the next item:

Santee, Wateree, and Congaree Rivers, South Carolina: For maintenance, including the Estherville-Minim Creek Canal and the Congaree River as far up as the Gervais Street Bridge, Columbia, \$30,000.

Mr. Treadway. May I ask the immediate need of this appropria-

tion, Colonel?

Col. Newcomer. This is mainly for use on the Congaree River. You know that from Columbia out they are maintaining a barge line, and the Columbia merchants claim, of course, that it is a matter of great importance for them to have that barge line in operation, and this is mainly for maintenance work on the Congaree River. In the

last bill there was an additional improvement authorized, but we left that out because we thought it was not sufficiently urgent.

The CHAIRMAN. If there are no further questions, we will take up

the next item:

Waterway between Beaufort, South Carolina, and Saint Johns River, Florida: For maintenance, \$43,000.

Mr. Hulbert. Colonel, what is the relation of this waterway to the waterway which you termed the waterway from Beaufort to Jacksonville?

Col. Newcomer. That was from Beaufort, N. C., to Jacksonville, N. C., a very short waterway. We have here grouped together three sections of the waterway which were formerly reported separately; that is all.

The CHAIRMAN. If there are no further questions, we will take up the next item:

Savannah River, below, at, and above Augusta, and Savannah Harbor, Georgia: For maintenance, \$380,000; for improvement of Savannah Harbor in accordance with the report submitted in House Document Numbered Fourteen hundred and seventy-one, Sixty-fourth Congress, second session, and subject to the conditions set forth in said document, \$500,000: Provided, That no expense shall be incurred by the United States for acquiring any lands required for the purpose of this improvement; in all, \$880,000.

Mr. Frear. With regard to this \$500,000 item, Colonel, what is the importance at this particular time of this improvement? This is above Savannah, as I recall?

Col. Newcomer. No. sir; below; that is, it is at the Savannah

 ${
m Harbor}$

Mr. Frear. Savannah Harbor has been extended, has it not?

Col. Newcomer. No, sir. We include in one item here all of Savannah River which, of course, includes Savannah Harbor, and the Savannah River below Augusta, which extends from Savannah to Augusta and the Savannah River above Augusta.

Mr. Frear. Is this for an extension of the depth, or what is it?

Col. Newcomer. This new project is to provide additional depth over the bar, and also some anchorage space inside. You will remember that that is a 400-foot channel, and it is very crowded. There is no place to turn vessels, and we want to have a turning basin and an anchorage ground, and the other matter of special importance is that the maintenance cost of this project is running very high on account of the deterioration of the training walls and controlling works which were built a number of years ago. The work in recent years has been confined almost entirely to dredging. Those training walls need to be built up and extended in order to reduce this very high cost of maintenance.

Mr. Frear. What are those walls, may I ask? Are they for the

protection of the land?

Col. Newcomer. No: they are for the protection of the channel, cutting off the side outlets, and other places where the silt is brought into it. They are usually mattress and pile structures, or timber structures and stone.

Mr. Gray. How long would it take to complete that project?

Col. Newcomer. The project involves a total expenditure of something like \$2,000,000, including the maintenance work during that time, of course.

Mr. Gray. About how long would it take?

Col. Newcomer. It would take about four years on a program like this.

Mr. Gray. That is what I wanted to know.

Col. Newcomer. But the immediate need, of course, for something there is to get some additional space for handling vessels. They need that very much.

Mr. Frear. Perhaps I had in mind the item of \$380,000 for the Savannah River below, at, and above Augusta. What is that for? Is not that for the building of retaining walls along the side of the

river?

Col. Newcomer. No, sir; the maintenance item of \$380,000 is made up, if I recall correctly, of \$350,000 for the harbor at Savannah and \$30,000 for the river between Savannah and Augusta. I suppose you are referring to the revetment at Augusta. That has already been provided for, and there is nothing in this bill for that.

The Chairman. If there are no further questions, we will take up

the next item:

Sapelo and Darien Harbors, Cowhead and Satilla Rivers, Club, Plantation, and Fancy Bluff Creeks, Georgia, and Saint Marys River, Georgia and Florida: For maintenance, \$12,500.

If there are no questions on that item, we will take up the next one: Brunswick Harbor Georgia: For maintenance, \$33,250.

Colonel, just for the information of the committee, why did you

not report the item for the new project at Brunswick?

Col. Newcomer. We did not deem that of especial urgency at this time, although it is a very desirable work, in order to permit boats to go out on single tide and give them somewhat greater draft also. They have now a project there of 23 feet at low water, which gives them practically 30 feet at high water.

Mr. Kennedy. What does the commerce there consist of roughly? Col. Newcomer. It consists of cotton and naval stores. I think

probably cotton is the most valuable item of commerce.

The CHAIRMAN. And also lumber?

Col. Newcomer. Lumber in large quantities also. It is quite an important harbor. It is one of the outlets of the Southern Railway.

Mr. Dupré. I have been given to understand that there are large possibilities there and that Brunswick Harbor is one of the very desirable harbors on the South Atlantic.

Col. Newcomer. It affords an opportunity for extending the facilities there at a moderate cost; that is, up to a 30-foot depth the expense probably would not be great.

The Chairman. If there are no further questions, we will take

up the next item:

Altamaha, Oconee, and Ocunulgee Rivers, Georgia: Continuing improvement and for maintenance, \$40,000.

Mr. TREADWAY. What is to be the nature of this improvement?

Col. Newcomer. This is a case where we formerly had a project to get a depth of 4 feet on these rivers. As a matter of fact, we found it was hardly practicable to get that at a reasonable expense, as compared with the commerce upon the river, and upon the recommendation of the department Congress adopted a project for an

annual expenditure of \$40,000, thinking that was a reasonable provision, or all that could be afforded for the commerce on the stream, and we have accomplished what we could with that amount toward ameliorating the conditions, and they are gradually increasing the depth and improving the shoals with that fund. It affords an opportunity not only to maintain and to do the necessary snagging and clearing of shoals that are formed, but it provides also a small amount which can be applied to additional improvement toward securing the 4 foot depth.

Mr. Treadway. Then this annual amount is a sort of arbitrary amount which was arrived at irrespective of the needs of the country

when the appropriation happened to be made?

Col. Newcomer. We could expend, of course, much more than this

and still not complete the 4-foot project.

Mr. Treadway. Yes; I can conceive of that; a great deal more.

Col. Newcomer. As a matter of fact, the district officer and the division engineer at that time, later Chief of Engineers, Gen. Kingman, as I recall it, recommended an expenditure of \$60,000, with the idea that that would give a 4-foot channel in a certain term of years.

Mr. TREADWAY. How long has this \$40,000 been carried?

Col. Newcomer. It is my impression that has run for four or five years. I am not sure when that was adopted, although I could find out from the annual report, of course. Congress thought that \$60,000 was greater than would be justified. The existing arrangement was adopted in 1912, and provides for an appropriation of \$40,000 a year.

Mr. Switzer. I think we increased the amount once or twice.

Col. Newcomer. I do not recall that you have increased the amount since this new project was adopted.

Mr. Treadway. As a matter of fact, the commerce has been neg-

ligible, has it not?

Col. Newcomer. The commerce on the Altamaha has been in the neighborhood of 100,000 tons. In 1915 it was only 76,000, and the year before that it was 103,000. On the Oconee the commerce was about 42,000 in 1915.

Mr. TREADWAY. That includes rafted logs.

Col. Newcomer. The amounts are stated here. It does include that; yes.

Mr. Treadway. And, as a matter of fact, there is but one boat in

operation

Col. Newcomer. There is only one regular transportation line in

operation between Macon—

Mr. Treadway (interposing). And they had to go to Europe or some other place to secure an engine which did not weight the boat down so that it could not go on the dew. I think that appears in our hearing.

Mr. Frear. We have spent over \$1,000,000 on that project, have we

not, Colonel?

Col. Newcomer. The amount expended on all the projects is

\$809,000.

Mr. FREAR. That is the amount expended on new work, and the amount spent on maintenance is about \$200,000, which makes it a little over \$1,000,000.

Col. Newcomer. Yes; that is right. About \$1,000,000 for new work and maintenance.

Mr. Treadway. And, of course, this comes within the general rule

of an emergency for national defense?

Col. Newcomer. This was classed in the general rule of maintenance rather than emergency. In other words, we proceeded on the policy that the existing facilities for navigation should be maintained. Most of this \$40,000 is, of course, required for the maintenance of the 3-foot depth. It does supply a little additional each year for continuing the improvement toward the 4-foot depth.

Mr. TREADWAY. Let me go back a moment, because that answer rather changes my idea of the method under which this bill is being framed. Any items of improvement you considered with reference to the emergency for national defense, and items for maintenance are to retain the upkeep of the present works; is that correct? I am asking a general question with reference to the basis of the bill, if I may.

Col. Newcomer. That is substantially the case. Of course you include in the term "national defense" any urgent commercial necessity which affects the national welfare as an element of national

preparedness

Mr. Treadway. Anything which affects the resources of the country; I suppose that would be true.

Col. Newcomer. Yes.

Mr. Kennedy. Let me ask you a question, Colonel. As a general proposition, is not the channel as maintained now in various streams of the country sufficient to accommodate the commerce offered and the boats which are in commission on those streams?

Col. Newcomer. No; I would not think so.

Mr. Kennedy. On what streams, if any, does that condition not obtain?

Col. Newcomer. Well, there are a great many streams—the Ohio, for instance, the Missouri, and the upper Mississippi. They are not adequate even for the existing commerce. In other words, existing commerce has trouble, and they can not accommodate the commerce

that they would accommodate with improved conditions.

Mr. Kennedy. Let me call your attention to what I called to the attention of Gen. Black when he was before us last winter in regard to the upper Mississippi. I am more familiar with that than the others. I take it that the appropriation which is made to prosecute the 6-foot channel on the upper Mississippi is expended largely on contracts; in fact, that is what I am told out there, and that the work of keeping a navigable channel open is done by the department plant. As a matter of fact, the Government plant for the past three years on the Mississippi River has not been in operation to exceed four months in the year. They have neglected, in other words, the ordinary work of keeping a navigable channel open at points where they are not working on the permanent 6-foot channel, and that has been the trouble out there.

Col. Newcomer. I think you will find, Mr. Kennedy, that that statement of the facts is disputed by some, as to the extent the Government plant has been used and as to the difficulties which have been experienced. There has been a good deal of controversy

over that point.

Mr. Kennedy. As a matter of fact, I remember that before the 6-foot channel was adopted the Government plant would start out in the spring under a lump-sum appropriation to keep open a navigable channel. They stayed out until the 15th of November, when navigation closed. It occurs to me the trouble out there has been with the maintenance proposition, because the money has been largely expended on contracts looking to the completion of the 6-foot channel.

Col. Newcomer. I think you will find the records will show there has been considerable money spent for maintenance; also in the oper-

ation of the Government plant.

Mr. Kennedy. The records will also show that a large part of the Government plant laid at the bank and has laid at the bank for the past three years on the upper Mississippi.

Col. Newcomer. You, of course, do not mean continuously?

Mr. Kennedy. I mean that the crews and the men which the Government employs have not gone out for the last three years until after the 1st of July. I understand that that is partly due to the fact that Congress has not passed the appropriation bill earlier in the session, but it is also due to the fact that whoever has charge of the distribution of the funds out there has let contracts for the work on the permanent 6-foot channel with the result that they have not had money enough to keep the Government plant keeping the channel clear in operation. It was called particularly to my attention by the fact that several engineers on Government fleets, three in my little town, quit and said, "We can not wait around nine months to get three months' work a year."

Col. Newcomer. Of course, you understand that most of the work of maintenance is done in a very limited time. For instance, take the dredges for the 9-foot channel on the lower Mississippi. I suppose, as a matter of fact, they do not average more than three months in the year, if they average that much. This maintenance work is required during the low-water season only. In other words, during the greater part of the year you have a channel, due to the stage of the water, which does not require dredging. As you approach the low-water stage, of course, the plant ought to get out and take care of the shoaling bars, etc., so as to get as much draft as you can

during the low-water season.

Mr. Kennedy. Now, as a matter of fact, could you not with a maintenance fund of, say, \$250,000, with a Government fleet, keep a navigable channel next summer in the upper Mississippi River?

Col. Newcomer. A navigable channel of what depth?

Mr. Kennedy. The depth you contemplate for commerce on that

stream.

Col. Newcomer. I should say not. I do not think it is possible to get, within a considerable limit of expenditure, a channel which is sufficient to accommodate them at all stages. Of course, the boats can load lighter and put on half loads and things like that, and, of course, they can proceed under such conditions. I do not mean to say that navigation would be blocked.

Mr. Kennedy. As a matter of fact, there is no through navigation on the upper Mississippi which requires deep-draft boats. There is just one line between St. Louis and St. Paul, which operates about

four months in the year during the heated season, and that is a passenger proposition pure and simple; and, as a matter of fact, before the 6-foot channel was adopted a navigable channel was kept at a nominal expense—a lump-sum appropriation, to keep the channel open. At that time there were 25 times as many boats on the river

as there are at the present time.

Col. Newcomer. Of course, at that time they had a project of 4½ feet. It was unfortunately the case, and we can not blink at the fact, that there is not any commerce on the upper Mississippi or on the Missouri or on the Ohio which justifies the expenditures that are being made there. There is no question about that. The only thing that can justify the expenditure will be the development of commerce after the improvement is provided. It is like a railroad, which you say can not carry commerce because it has not the facilities for carrying it. It is true there has been greater commerce on those streams in the past than at the present time. That commerce has largely been diverted to railroads, because the railroads afforded them better facilities.

Mr. Kennedy. The fact is that commerce is falling off, and part of this line is being converted into pure excursion boats. The only line they had with a little local traffic, instead of making daily round trips is making a round trip each two days. It seems to me that in a bill of this character the 6-foot channel proposition on the Mississippi River might well be suspended for the present and a sufficient sum provided to keep an open channel. Now, do not think I am prejudiced against this proposition, because 60 per cent of the

people I represent live in counties bordering on this stream.

Col. Newcomer. That is a matter we would regard as being a matter more for the discretion of Congress. We understand that Congress has embarked upon this proposition, which involves a very large expenditure, and very large sums have already been expended on it. To stop short of the goal, you certainly do not promote any development of traffic there, and you discourage any efforts which are being made now by the different cities along the river to build up their terminals and get better facilities. As I say, it is a question of discretion. We thought it ought to be included, because so much had been expended, and it is so important to keep alive any possibility of commerce there that we included it.

Mr. Kennedy. It occurred to me that this is typical of other streams and at this time, when we are taxing the people to the greatest extent ever known in the history of the country, we ought

to cut out the things that can be cut out at this time.

Col. Newcomer. You will notice that we have on most of the streams cut out the improvement and limited it to maintenance, and we feel that those propositions ought to go to Congress for its deter-

mination.

The CHAIRMAN. Before we leave this item for the Altamaha, Oconee, and Ocmulgee Rivers, I will say that I have added up the commerce for the calendar year 1915, and I find that they had a commerce of 152,333 tons, with a valuation of \$2,378,852.

Mr. Frear. May I inquire if that does not include logs and cross-

ties?

The CHAIRMAN. I did not look up the items.

Mr. Frear. My recollection is that those three streams averaged about 4,000 tons of commerce outside of the timber which is carried.

The CHAIRMAN. The reports are available to any member of the committee, and you will find it in detail in either the second or third volume.

If there is no objection, we will proceed with the next item.

Indian River, Saint Lucie Inlet, Miami Harbor (Biscayne Bay), and harbor at Key West, Florida: For maintenance, \$6,000; completing improvement of Miami Harbor, \$160,000: Provided, That the work proposed under the project adopted by the river and harbor act approved July twenty-fifth, nineteen hundred and twelve, may be done by contract if reasonable prices can be obtained; in all, \$166,000.

Col. Newcomer. Mr. Chairman, inasmuch as the point has been raised as to the amounts carried by boats and rafts, I happen to have the second volume before me, and that indicates—

The Chairman (interposing). You are referring now to the item

for the Altamaha, Oconee, and Ocmulgee Rivers?

Col. Newcomer. Yes. On the Altamaha the total by boats was 8,770 tons, by rafts and lighters 67,993 tons. On the Oconee the total by steamboats was 19,906 tons, and the amount of lumber rafted was 22,019 tons. On the Ocmulgee the total by steamboat was 19,886 tons, and by raft and lighters about 13,700 tons, so there was quite a

considerable proportion carried by boats.

Mr. Frear. Of that which was carried by boats on the Altamaha 2,014 tons consisted of crossties, hardwood blocks 1,000 tons, and, of course, that takes out nearly one-half the commerce on the Altamaha. On the Oconee there was 13,725 tons of oak blocks, which brings it down practically to the figures I gave. This is found on page 2281 of the report.

Col. Newcomer. But it was not rafted.

Mr. Frear. No; but it might have been carried by barges or any-

thing like that.

Col. Newcomer. It is the work we are doing which makes it possible to move the barges, of course. The rafting is done mainly on the tides or freshets, and, of course, to a certain extent, the movement of boats is done in the same way, but we need the improvement

mainly for the movement of boats.

Mr. Frear. There is nothing here to indicate how it was carried. There were two steamboats operated on the Oconee River during the year 1915, neither of which ran on a regular schedule. One boat made 110 trips. It does not state the size of the boats. Colonel, would any of the commerce here be duplicated by reason of the comparative location of the streams?

Col. Newcomer. I think not, but I do not know. The records

should show.

Mr. Booher. May I ask whether crossties are not an important part of commerce?

Col. Newcomer. Yes, sir; it is important to the people who handle

them.

Mr. Booher. And it is considered important for that?

Col. Newcomer. Yes, sir; very important; and crossties now, on account of the value of them, are shipped much more by barge than by rafting, as formerly.

The CHAIRMAN. The next item is—

Indian River, Saint Lucie Inlet, Miami Harbor (Biscayne Bay), and harbor at Key West, Florida; for maintenance, \$6,000; completing improvement of Miami Harbor, \$160,000: *Provided*, That the work proposed under the project adopted by the river and harbor act approved July 25, 1912, may be done by contract if reasonable prices can be obtained; in all, \$166,000.

Mr. Frear. It was thought necessary and desirable to put that in

this bill, I see, Colonel.

Col. Newcomer. Yes, sir. At Miami the locality has cooperated to a great extent by building terminals, and there has been a fulfillment of the conditions imposed. We consider it very desirable to afford accommodations on that part of the coast of Florida. As you know, it is a very long coast without any commercial facilities, and it is very desirable to give them.

(Thereupon, at 12 o'clock noon the committee took a recess until

2 o'clock p. m.)

AFTER RECESS.

The committee met, pursuant to the taking of a recess, at 2 o'clock p. m.

The Chairman. Gentlemen, we will proceed with the next item:

Tampa and Hillsboro Bays, Saint Petersburg Harbor, Hillsboro and Manatee Rivers, Florida: For maintenance, \$66,500; for improvement of Hillsboro Bay in accordance with the report submitted in House Document Numbered Thirteen hundred and forty-five, Sixty-fourth Congress, first session, and subject to the conditions set forth in said document, \$300,000; in all, \$366,500: Provided, That nothing in this act, nor in the act approved June twenty-fifth, nineteen hundred and ten, entitled "An act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes," shall be so construed as to prevent the use of any part of the Ybor Estuary zone for industrial or other legitimte purposes when the same is not needed for commercial uses, nor to exclude the building and operation of a railroad or railroads by private parties or railroad companies under such rules and regulations as the Secretary of War may prescribe, subject to the right of the city of Tampa to construct and operate a municipal railroad on said estuary zone as set forth in said report. The Secretary of War is hereby authorized to prosecute the work of improvement on the existing project for Saint Petersburg Harbor, in accordance with the modified conditions recommended by the Chief of Engineers and the Board of Engineers for Rivers and Harbors in the report printed in Rivers and Harbors Committee Document Numbered Six, Sixty-fourth Congress, second session.

Colonel, will you kindly explain this item to the committee and

the necessity for it?

Col. Newcomer. The first important item, of course, is for the further improvement of Hillsboro Bay, the harbor of Tampa. We considered that there was a special importance in this case, due to the fact that practically all of the phosphate rock of Florida which is used as fertilizer comes from this port, and they are very much hampered now by the fact that these ships can not go out carrying full loads. They have a 24-foot project, and it is proposed to give them a 27-foot project. They asked for a 30-foot project, but after considering the matter, the department recommended it be increased to 27 feet, and it is proposed to give them 27 feet, which is the same as the Mobile Harbor has for about the same tonnage of commerce. The fertilizer element is what we might call the especially urgent feature at this time.

Mr. Hylbert. Is there a naval station there?

Col. Newcomer. No, sir.

Mr. Switzer. I think that practically all the prosphate rock comes from there, except some from Tennessee, I believe.

The CLERK. Eighty-seven per cent of the phosphate in the United

States is produced in that district.

Mr. Switzer. That is my recollection.

Mr. Dies. Does that embrace the Tennessee field?

The Clerk. No. sir.

Mr. Dies. There is more produced, then, in Florida than in Tennessee?

The CLERK. Yes, sir; 87 per cent of the entire production of the

United States.

Mr. Booher. I think this item includes the items found on page

20 of the original bill down to Apalachicola Bay on page 21.

Col. Newcomer. Yes, sir; I think that is right. It includes some other improvements that are not on that page simply on account of the grouping.

The CHAIRMAN. They are maintenance items?

Col. Newcomer. Yes; that is all. The significance of the second item authorizing the work in St. Petersburg Harbor to be carried on in accordance with the later recommendation is on account of the fact that the situation there is changed. The original plan for the improvement of St. Petersburg Harbor provided for an entrance channel to be constructed by the Government and an inner basin to be constructed by the locality. They found, after beginning that work, that they wanted to modify quite radically their plans for the inner basin, on account of getting ultimately a better terminal proposition.

Mr. Booher. Col. Newcomer, you left out of this bill, of course, the

Senate amendment?

Col. Newcomer. Yes; for Sarasota Bay.

Mr. Dupré. And also eliminated the continuing contract which the House inserted?

Col. Newcomer. Yes, sir; on the proposition that this bill would

not carry any continuing-contract authorizations.

The CHAIRMAN. If there are no further questions, we will proceed with the next item:

Saint Johns River, Florida, Jacksonville to the ocean, opposite the city of Jacksonville, Jacksonville to Palatka, and Palatka to Lake Harney, Lake Crescent and Dunns Creek, Deep Creek, and Oklawaha River, Florida: For maintenance, \$335,000.

Mr. Hulbert. Is all that amount absolutely urgent, Colonel?

Col. Newcomer. The greater part of that is required for the jetties at the mouth of the St. Johns River, and it is urgent to repair them. The maintenance of that channel depends upon the integrity of the jetties, and they have gone down a good deal at the outer ends, and also one of the shore connections is considerably lowered.

Mr. Hulbert. Could not that be cut now, in view of this emer-

cency?

Col. Newcomer. We have not made any effort to cut any of these propositions for maintenance, because they were gone into very carefully before and we considered them a reasonable allowance for the purposes.

The Chairman. If there are no further questions, we will proceed with the next item:

Kissimmee, Caloosahatchee, Orange, Anclote, Crystal, Withlacoochee, and Suwannee Rivers, Charlotte Harbor, Sarasota Bay, and Clearwater Harbor and Boca Ceiga Bay, Florida: For maintenance, \$11,000.

Colonel, is there any statement you desire to make with reference to this item?

Col. Newcomer. I do not think there is anything of special note there, unless some Member desires to ask some question about it.

The CHAIRMAN. It is maintenance? Col. Newcomer. It is all maintenance.

The Chairman. And necessary?

Col. Newcomer. Yes, sir.

The CHAIRMAN. The next item is:

Removing the water hyacinth, Florida: For the removal of the water hyacinth from the navigable waters in the State of Florida, in so far as it is or may become an obstruction to navigation, \$10,000.

Mr. Booher. Colonel, I want to ask a question about the water hyacinth. We have a water weed in my country which is called the water lily. Is this the same thing as the water lily?

Col. Newcomer. I do not think it is the same thing as the water

lily.

Mr. Booher. The water lily, you know, Colonel, grows up with big wide leaves, and then a stem runs up and has a big yellow bloom on

it, and it is a very pretty flower.

Col. Newcomer. I know the flower, but I think this is a different proposition. I have never been in the South to see this water hyacinth. We have it not only in Florida but in Louisiana.

Mr. Taylor. Is it not just the ordinary water lily?

Col. Newcomer. I do not think so. Mr. Taylor. Does it grow from seed?

The CLERK. It propagates from the roots, as I understand. In the spring floating masses form which it spreads rapidly. It can be propagated from the seed.

Col. Newcomer. I know it spreads very rapidly and grows in such

large quantities as to block boats.

The Chairman. I would suggest that if the members of the committee want any information about the water hyacinth Mr. Dupré,

of Louisiana, can probably tell them all about it.

Mr. Dupré. I know it is a great evil in our part of the country. As I understand, it is an entirely different sort of plant from the water lily. It propagates very much more rapidly, and it herds together, so to speak, until it really bridges a stream, and it is necessary from time to time, in order that these streams be kept navigable, that the dredgers, which this appropriation contemplates the use of, should be sent up there to clear the thing out. It was thought at one time that the application of certain chemical processes would be helpful, but that has not proved a success, and its removal is dependent practically on the use of dredges. I know that because I have it in my own district and there is continual demand on me to have a dredge sent there to clean it out.

Mr. Booher. They obstruct navigation, do they?

Mr. Dupré. You can almost walk across the thing. The roots get down so deep in the water and they are so closely connected that you can not see the water at all.

The CHAIRMAN. Gentlemen, we will proceed with the next item:

Carabelle Bar and Harbor, Apalachicola, Saint Joseph, and Saint Andrews Bays, Apalachicola and Chipola Rivers, and channel from Apalachicola River to Saint Andrews Bay, Florida; Flint River, Georgia, and Chattahoochee River, Georgia and Alabama: For maintenance, \$77,500; continuing improvement of Apalachicola River, including the cut-off, Lee Slough, lower Chipola River, and upper Chipola River from Marianna to its mouth, \$18,000; in all, \$95,500.

Mr. Hulbert. Colonel, what is the immediate urgency of continu-

ing the improvement of the Apalachicola River at this time?

Col. Newcomer. The Apalachicola River, you know, is the outlet of the Flint and the Chattahoochee and there is quite a little commerce there, not only to Apalachicola Bay but by means of a connecting canal to St. Andrews Bay, and there is one bar at Blountstown on the Apalachicola River which has been giving a great deal of trouble and that is where the improvement money is proposed to be spent.

Mr. Hulbert. What is its relation to the exigency we are limited to in making up this bill, which I understand, so far as continuing projects is concerned, is dependent upon the question of national

defense?

Col. Newcomer. The amount that is involved here for continuing improvement is quite small, and the obstruction there is very important as affecting all that commerce. I think it is a very wise expenditure of money to make. It is a commercial proposition. I do not know that in this case there is any special military feature involved. Of course there are naval stores which come from all these streams to a greater or less extent. I do not know that they are specially involved there. It is simply an outlet for the commerce of this region, which has very poor rail facilities.

The CHAIRMAN. Colonel, you regard all these items of maintenance

as urgent and necessary?

Col. Newcomer. Yes, sir.

The CHAIRMAN. We will take up the next item:

Holmes and Blackwater Rivers, Florida, Choctawhatchee, Escambia. and Conecuh Rivers, Florida and Alabama, the narrows in Santa Rosa Sound, and Pensacola Harbor. Florida: For maintenance, \$9,500.

Col. Newcomer. There is no special note about that.

Mr. Hulbert. It is all urgent?

Col. Newcomer. It is required for maintenance.

Mr. HULBERT. Will any part of this money be spent on the Holmes River?

Col. Newcomer. About \$1,000, as I recall it, at the mouth of the Holmes River.

Mr. HULBERT. Is there any commerce on the Holmes River now? Col. Newcomer. Oh, yes. The project provides for working up the Holmes River for a considerable distance, but we have suspended work except at the mouth, because that is the most important point, and we are limiting the work to that point. There is quite a large amount of products and naval stores which come out of this country.

The CHAIRMAN. The next item is:

Mobile Harbor and bar, and channel connecting Mobile Bay and Mississippi Sound, Alabama. For maintenance, \$115,000.

Mr. Gray. Colonel, I would like to ask you several questions. I will first ask this question for information: How many new or continuing contract propositions are proposed in this bill? Have you that information at hand? Of course, I could look over the bill and ascertain, but I thought probably you had the information at hand.

Col. Newcomer. It is my impression, Mr. Gray, that there were 81 new projects originally carried in the bill as it went to the Senate from the Senate committee, and I think there are 27 included in this

bill.

Mr. Gray. Twenty-seven new projects?

Col. Newcomer. Yes; practically one-third of them are retained. That is the statement made to me. I have not verified it myself.

Mr. Gray. Of those that you have brought in in this tentative bill, which ones do you consider the real emergency propositions of the 27?

Col. Newcomer. I have indicated, of course, in a number of instances the particular feature in each case as we came to it. I think in every case so far I have indicated the feature that appealed to us as having special urgency. For instance, Tampa Bay Harbor, where they have only 24 feet draft, carry a heavy tonnage; the tonnage in that case being fertilizer, which is a matter of special importance.

Mr. Gray. I am simply asking this as a matter of comparison.

Mr. Gray. I am simply asking this as a matter of comparison. You really consider that all the projects you recommend in this bill

are emergency propositions?

Col. Newcomer. Yes, sir.

Mr. Gray. It is a fact, is it not, that the Government has spent millions of dollars on the Tombigbee River and its tributaries which extend into the mineral district of Alabama?

Col. Newcomer. Yes, sir.

Mr. Gray. What do you consider the real purpose of this great expenditure of money?

Col. Newcomer. To get the coal out.

Mr. Gray. What was the real purpose of this great expenditure of

money

Col. Newcomer. The proposition, as I have always understood it, has been to give access to the coal fields. They have there very extensive coal fields, and the important proposition involved was to give access to them from the seaboard.

Mr. Gray. And for armor plate and other things that go into the

building of vessels?

Col. Newcomer. If they chose to ship it that way; but I question whether it would be done.

Mr. Gray. Why?

Col. Newcomer. For the simple reason that we do not, as a matter of fact, find in practice that traffic of that kind will go by rail and then be transferred to boats to be carried a few hundred miles and be transferred again. In other words, if it could go through, or if you had a canal connecting the Birmingham district with the Black Warrior system, then it is possible that it might be cheaper by water. Of course, I do not mean to say that it is not possible to do it that

way, but we have not been expecting to see shipments of these heavy

things by water unless there is water at the point of origin.

Mr. Gray. Leaving out the river proposition, would not the failure of the Government to provide a sufficient depth of water in the channel prevent dead-weight cargoes from being handled economically and effectively from the Birmingham district through the harbor and out into the open sea?

Col. Newcomer. That is very true.

Mr. Gray. Well, it is necessary to export this stuff, is it not?

Col. Newcomer. Yes, sir; it will probably go out, or a good deal

Mr. Gray. Some of it will be exported.

Col. Newcomer. It was expected that coal from Alabama would go out not only through the Mobile Harbor but also through Pensacola and New Orleans. Those were the three points that were considered to be the principal points. Of course it can go through those ports now. I suppose you are referring to the Mobile project.

Mr. GRAY. Yes.

Col. Newcomer. The Mobile project has recently been extended from 23 feet to 27 feet. It was only a year ago, or, possibly, a year and a half ago that they secured the 27-foot project, and there is now a favorable recommendation before Congress for a 30-foot project That item was included in the last river and harbor bill, and we considered it an important matter. However, we have found that there is some question as to whether the 30-foot project should be taken up at this time, so near to the time when the 27-foot project was provided, and without having had much experience to show to what extent they would utilize that. It has been only within the last two or three years that they could go in there with boats drawing more than 23 or 24 feet. Now, to what extent they are utilizing that 27-foot channel I do not know, and, of course, the present cirstances are not favorable to the development of that situation.

Mr. Gray. Some of those new projects that you put in the bill can not be completed under four years? It will take four years to com-

plete them, will it not?

Col. Newcomer. It probably will.

Mr. Gray. Then, how would you meet the immediate needs on those projects? I simply suggest that as a matter of comparison, and I am not trying to take away any of those appropriations.

Col. Newcomer. Of course, the full benefit would not be obtained until the projects are completed, probably, but we may be able to get

certain facilities before that time.

Mr. Gray. In making preparations for war, what material would you think that the Government was most in need of for building boats—both warcraft and commercial transports? That, of course, is a practical question.

Col. Newcomer. Just at present, of course, they are proposing to utilize lumber most extensively. They are proposing to build wooden

ships.

Mr. Gray. And they would have to have a good deal of iron and

steel, would they not?

Col. Newcomer. Undoubtedly they would like to have steel ships also, and they would want to build them as rapidly as possible.

Mr. Gray. Don't you think that iron and steel, and especially lumber, can be handled more cheaply by water than by rail? Really, is not that the fact?

Col. Newcomer. Under comparable conditions; yes, sir; if the

water is accessible.

Mr. Gray. If not, we ought to abandon the improvement of these waterways.

Col. Newcomer. If the tonnage is accessible to the water, that is

Mr. Gray. They are absolutely taking those products out of the sides of the banks and are throwing them on barges at some places above Tuscaloosa. I am referring to coal. Col. Newcomer. Yes, sir.

Mr. Gray. And that is necessary, is it not?

Col. Newcomer. Yes, sir.

Mr. Gray. You spoke of the manufacturing plants—what about lumber products in vast quantities, both oak and pine, along this river?

Col. Newcomer. They are extremely important. Of course, there is a great deal of lumber coming out of Mobile, also out of Gulfport and Pascagoula.

Mr. Gray. What about the immense cement beds there in the Dem-

opolis section? Would not cement be used very extensively?

Col. Newcomer. Of course, so far as they have made preparations to develop it. They have, as I understand it, one plant there; but I do not know how extensively they manufacture cement. There are undoubtedly great resources there, but they are mostly undeveloped.

Mr. Gray. If those things could be furnished cheaply and expeditiously by this means, it would not be unwise to continue this improvement, would it? Would not that be considered an emergency, if we needed those things? Would not that be considered as an emergency

proposition?

Col. Newcomer. Of course; but whether there would be any necessity of giving an additional 3 feet of depth at Mobile or increasing the depth from 27 to 30 feet is another question. As I understand it, that is the proposition you have in mind. Of course a depth of 27 feet carries a very good tonnage. Most of the tramp steamers, or a great many of them, can carry a full cargo on that depth. It is better, of course, to have 30 feet, because 30 feet would take nearly all of the steamers. Some steamers will draw more than that, but I suppose that 95 per cent of the tonnage in New York Harbor comes in on 30 feet draft or less. Of course, here you have a harbor where you can meet things fairly well with your 27-foot project. I do not, of course, question the immediate desirability of having 30 feet.

Mr. Gray. As a matter of fact, is not this river system considered to be the second in importance in this country? It is second, prob-

ably, to the Mississippi River and its tributaries.

Col. Newcomer. I question that. I do not want to depreciate the

importance of this system.

Mr. BOOHER. Is it your intention, then, to advise the abandonment

of the 30-foot project?

Col. Newcomer. No, sir; I would like to see that in the bill, as well as these other things that have been eliminated from the bill.

Mr. Htlbert. Is this 27 feet depth in the bay, or does it extend some distance up the river?

Mr. Gray. It is through the channel.

Col. Newcomer. It extends up the river a short distance.

Mr. Hulbert, How far?

Col. Newcomer. A few thousand feet along the harbor front. Mr. HULBERT. Then you have a greater project depth there than

in the East River.

Col. Newcomer. There would be. I think the present project depth in East River is 26 feet.

Mr. HULBERT. It is 26 feet, and that is only about 65 per cent

complete.

Col. Newcomer. We propose a project depth of 35 feet in the bill. Mr. Hulbert. But you limit that to two points. I was in sympathy with the suggestion made by Mr. Gray, because unfortunately there are certain ports along the Atlantic and Gulf that have not been improved proportionately with other ports.

Mr. Switzer. Which do you consider the most important?
Mr. Hulbert. Considering the fact that the State of New York has had to build the \$160,000,000 State barge canal at its own expense. I think it is more important. That links up the Great Lakes with the Hudson River.

Mr. Gray. Col. Newcomer, when this bill was prepared, it was felt that, in view of the fact that Mobile could not be finished up as a new project for quite a number of years, the present accommodations would answer every reasonable purpose other than for the

exportation of coal.

Col. Newcomer. I do not think that we considered particularly the clause that you have interjected there about the length of time required to complete Mobile. It was simply a question of whether it was urgently necessary to take it up at this time. I do not think that it would take any longer in the case of Mobile than it would take in the case of Tampa to complete the project. That was not the deciding consideration at all. It was simply thought that a depth of 27 feet does make fairly adequate and reasonable provision for the commerce there.

Mr. Gray. Is it not a fact that a great deal of fertilizer is coming

from South America into the port of Mobile?

Col. Newcomer. I do not know about that. Mr. Gray. You are not informed as to that?

Col. Newcomer. No, sir.

Mr. Gray. So that the question of time in making these improve-

ments did not figure in it?

Col. Newcomer. No, sir; I did not say that. I said that in considering Mobile we did not throw it out because of the time involved. That was not the proposition there. I think we have abandoned any number of projects and recommended a number of projects where the time of completion is far in the future, but we hope to get results from them in the near future that will be of value. Take that case of the East River, for instance, where the project is one involving the expenditure of many millions of dollars. What we need now is to get a practicable channel through there as soon as we can.

Mr. HULBERT. But you are taking that up for military purposes? Col. Newcomer. For both military and commercial purposes.

Mr. Hulbert. The commercial necessity in East River is around the dock approaches, and you are not making any provision for them

at all.

Col. Newcomer. I do not think that they need it so much. There is a very large reef there covering a large portion of the eastern shore of Manhattan Island, which, of course, is cut off, but nobody ever proposes to establish deep-draft docks at that point. There are many places that are fairly accessible to the docks and wharves, and the people who build these wharves usually provide the channels in the vicinity.

The CHAIRMAN. Just in order to get the record complete, I will make this statement: I find that in Tampa Bay the commerce for the calendar year 1915 was, as Mr. Frear has stated, 1,829,540 tons, while the commerce of Hillsboro Bay was 1,251,027 tons for the same

year

Mr. HULBERT. If I may be permitted, Mr. Chairman, I would like to put in the record at this time the figures showing the tonnage in the East River for 1915. That tonnage was 74,178,177, having a value of \$4,192,206,408.

The CHAIRMAN. The next item is—

Alabama River, Alabama, and Coosa River, Alabama and Georgia: Continuing improvement and for maintenance, \$50,000.

Are there any questions on that item? If not, we will proceed to the next.

Tombigbee River, Alabama and Mississippi. For maintenance from mouth to Demopolis, Alabama, \$30,000, and from Demopolis, Alabama, to Walkers Bridge, Mississippi, \$10,000. In all, \$40,000.

Mr. Frear. Are these the same amounts that were in the last time, Colonel?

Col. Newcomer. Yes, sir.

Mr. Hulbert. May I revert to the preceding item, Mr. Chairman, and ask what the particular urgency is for continuing the improve-

ment included in the amount of \$50,000?

Col. Newcomer. The continuing improvement in that case applies more particularly to the building of wing dams and things of that kind, which, of course, afford a better maintenance of the channel. It is a work that, practically, you might say, is a maintenance proposition and involves the building of these additional works. And \$50,000 is considered about the minimum amount that will take care of that work for a year.

Mr. HULBERT. Is there any difference in the character of the necessity for opening up that ledge of rock in the Coosa River and taking out the rock at Macombs Dam Bridge in the Harlem River, so as to

provide a uniform depth of 15 feet?

Col. Newcomer. I do not think substantially there is any differ-

ence. Of course you ought to have your full project depth.

Mr. HULBERT. Could not this as well be eliminated as the item of \$250,000 for a similar improvement in the Harlem River was eliminated?

Col. Newcomer. No, sir; I think not. The Macomb Dam work is now being taken up, as I understand, with funds on hand, so that

you can get an additional depth through. Of course this improvement, like the Alabama, Chattahoochee, Flint—all of those involve the open-channel improvement, which is a more or less difficult proposition in this way, that the low-water flow is usually inadequate to provide a really adequate channel depth, and the consequence is that in order to permit their navigation to the best effect we have to keep snag boats in operation there, do more or less dredging, and build wind dams so as to get the best result we can. It is a continuous proposition which is not very satisfactory but the commerce involved seems to be sufficient to justify caring for it in this

The CHAIRMAN. The next item:

Pascagoula Harbor, Mississippi: Continuing improvement and for maintenance of channels through Horn Island Pass, Mississippi Sound, Pascagoula River, and Dog River, \$113,000.

Mr. Gray. Now, I do not want to object to that at all, understand, but what are the specific needs for the little harbor there in

the Pascagoula River?

Col. Newcomer. That is a case where they have only a 17-foot project, and it is a lumber port. Seventeen feet, of course, is a rather inadequate depth for lumber shipment. They have to send out a great deal of their lumber to the Gulf; as a matter of fact, they have to load it on lighters in order to get it on the deeper-draft boats.

Mr. Gray. As an emergency proposition, why is it any more an emergency than to get lumber through the port of Mobile? That is what I am speaking of. I know it is an advantage and I think we ought to have it; I am not kicking against that.

Col. Newcomer. Don't you see, it is a more difficult thing to get

lumber out of a 17-foot port than it is out of a 27-foot port.

Mr. Gray. I see that, of course.

Col. Newcomer. Lumber vessels draw usually anywhere from 20 to 25 feet; that is, the run of the seagoing lumber boats.

Mr. Gray. Is that the principal industry there?

Col. Newcomer. Lumber is practically the only industry, as I understand it.

Mr. Dupré. And naval stores.

Col. Newcomer. Yes; they have naval stores, as I understand.

Mr. Frear. Is that for the one or two mills there near the en-

trance, or what is that for, Colonel?

Col. Newcomer. I do not know the number of mills involved in that case. That is the outlet, you know, of the Leaf, Chickasahay, and Pascagoula Rivers. It is quite a lumber territory, but I do not know how many mills there are down there at Pascagoula. I suppose there are several.

Mr. Frear. Out of 102,000 tons, on page 2,400 of the report, 12,000 are slab; 75,000 are lumber and timber, in round numbers; 5.968 are crossties. That makes a little over 90,000 tons of timber

products out of 102,000.

Col. Newcomer. It is practically all timber products.

Mr. Frear. This item is putting \$113,000 in that harbor. What was put in last year, Colonel?

Col. Newcomer. I do not recall.

Mr. Dupré. The same thing. I have both amounts here, and they are the same.

Mr. Frear. I mean the last year, 1916.

Col. Newcomer. You mean the last appropriation. I will have to look that up. It is \$80,000.

Mr. Frear. How much—\$80,000?

Col. Newcomer. \$80,000.

Mr. Frear. Now, let me understand. In 1916 we appropriated \$80,000 for this 12,000 tons of commerce outside of wood products, and there is an additional 113,000 in this bill; and we have already appropriated \$1,413,000.

Col. Newcomer. No; but we did not spend it for the 12,000 tons outside of the timber products; we spent it for all of the tonnage of

the port and the other products that are shipped in boats.

Mr. Frear. What is the nature of the improvement; does it run up the river for a mile, or what?

Col. Newcomer. Í beg pardon?

Mr. FREAR. Does that improvement run up a mile or so, or what is the character of it?

Col. Newcomer. It runs up into the Dog River on which the mills

are situated; yes, sir.

Mr. Frear. Have these people who are there paid anything toward

these improvements?

Col. Newcomer. They have been required to do certain cooperative work—furnish terminals. There was originally a condition imposed, under which this project on which we are now working would require a contribution of a certain amount of money by them and also the construction of certain terminals. Congress subsequently withdrew the requirement for a contribution of an equal sum from them to that provided by the Government.

Mr. Frear. That was stricken out by the Senate.

Col. Newcomer. But it still required the other condition about the terminals and provided that the amount that the Government was to spend should be applied to furnish such depth as it could. In other words, as I recall now, the total expenditure was in the neighborhood of \$300,000, or something like that. They were to provide half and we half; and then Congress released them from the condition of supplying that sum of money and authorized the expenditure of the Government's share to get as much of the project increased depth as they could.

Mr. Frear. The engineers recommended this contribution, did they not, and then Congress took it out of the hands of the engineers, that is, the Senate did, as I now recollect; it struck that provision

out.

Col. Newcomer. I do not recall all of the details of the transaction, but I do know this, that the matter was referred back to the Board of Engineers once or twice for consideration as to whether those conditions might not be waived. As to just what action was taken, whether the final action was taken by Congress without reference to the recommendations of the department, or not, I do not know; I think it was.

Mr. Frear. May I ask why the engineers asked for that contribu-

tion, because this has a bearing on all cases of contribution?

Col. Newcomer. This appealed to us as did a number of other cases on the Pacific coast, for instance, where one industry is the principal industry affected and where, therefore, it is a simpler proposition, apparently, to get cooperation on a just basis where there is only one industry affected, because those people are usually few in number and we can get at them and insist on their contributing; so that at that time the department felt that was a desirable condition to impose. As I say, I do not recall all of the details now.

Mr. Frear. That is as I understand the reports.

Col. Newcomer. Yes, sir.

Mr. Dupré. May I ask you a question? Will you indicate to me what reason there is why a stream or a harbor, on which mainly lumber is transported, the lumber being export lumber, should not be developed as well as any other stream?

Mr. Frear. As long as I am put on the stand as an expert—

Mr. Dupré. I do not mean to be offensive, but that has been running through your mind apparently all day and I wanted to hear

why you thought it should not be deepened.

Nr. Frear. On the stream on which I live there has been more lumber shipped and logs shipped than on the Mississippi River according to the statements of the men who live there. That, of course, would be twenty times the amount that goes out of the Pascagoula Harbor, which is very small, comparatively. One hundred thousand dollars has been spent on that river in all that time, and the reason for that is, referring to the carrying of these lumber products, which, of course, are valuable, that they have been carried on the small boats and moved on lighters, as the colonel suggests is done here. Now, here is the record and, as I understand, I think the record shows that this Pascagoula River carries up to two or three mills and the Army engineers recommended that a contribution should be had, but it was stricken out (and we can all form our own judgment why) in one of the Houses, and now the Government is required to pay this difference which, out on the coast, is required and insisted upon to be contributed; that is, it is out on the Pacific coast. But in this case it has been abandoned and the engineers' recommendation overruled. That is as I understand it.

Mr. Dupré. I did not have in mind the question of the abandonment of the local contribution feature, because that applies to this particular proposition; but all along the line of your remarks, it seems to me that has been underlying. Now, possibly, is not the reason why only \$100,000 has been spent on your stream is because you have a very good stream and did not need to spend more than that to develop it properly?

Mr. Frear. Oh, no; it is because the timber is all carried down on the small boats. Now, just let me give you, right here on the following page, an illustration of what my meaning is: On page 2401, on the Chickasawha, the overhanging trees felled and cut up number 5,896 and the bushes and all the stumps and snags cut there reaching 18,203, different obstructions in just that one river for that small amount of timber and lumber carried into Pascagoula Harbor. I speak of that because it shows while this is all largely for the benefit of those two or three mills there and could be easily carried on small boats, an expenditure reaching \$1,400.000 has gone into that project,

and that they have been able to avoid the contribution which was urged by the engineers.

Mr. Booher. Can you give us the value of the lumber products that have gone out of that stream in all those years?

Mr. Frear. No; I could not give you the value of that which has gone out of the Mississippi and St. Croix, but I think on the comparative basis of the shipments made in the last year, it was easily ten dollars to one; and here is \$113,000 estimated for this river for this one year.

Mr. Booher. Perhaps your river up there is not like the southern rivers, is not like this river; it does not wash and shoal. These southern rivers have sandy soils and they form bars and shoals, and they have to be taken out or we would not have any transportation

at all.

Mr. Frear. My thought in bringing this out was that the engineers were right in urging the contribution and that it ought to have been followed up, because it is a tremendous expense upon those local sawmills there.

Mr. Kettner. Col. Newcomer made the statement, if I understood him aright, that on the Pacific coast, where the benefit accrues mostly to a single individual-

Col. Newcomer. Industry; not individual.

Mr. Kettner. Well, industry. Did you have in mind any in California?

Col. Newcomer. More particularly those lumber ports on the coasts

of Oregon and Washington.

Mr. Kettner. I know California always donates her share, and we have not a single port in California that I can recall where the benefit of river and harbor improvement would accrue to a single corporation.

The CHAIRMAN. The next item:

Gulfport Harbor, Miss.: Continuing improvement and for maintenance of anchorage basin at Gulfport and channel therefrom to the anchorage or roadstead at Ship Island and for the improvement and maintenance of channel at Ship Island Pass, \$80,000.

The next item is:

Pascagoula, Wolf, Jordan, Pearl, and East Pearl Rivers, and Biloxi Harbor, Miss.: For maintenance, \$10,000.

Next item:

Yazoo River and tributaries, Miss.: For maintenance, including Yazoo, Tallahatchie, Coldwater, and Big Sunflower Rivers, Tchula Lake, Steele, and Washington Bayous, Lake Washington, and Bear Creek, \$20,000.

Next item:

Passes at the mouth of the Mississippi River: Continuing improvement and for maintenance, \$1,825,000.

Mr. Hulbert. Which pass is that intended to cover?

Col. Newcomer. Mainly the Southwest Pass, and some of it goes to the South Pass also.

Mr. Hulbert. Do you know what proportion will be applied to Southwest Pass?

Col. Newcomer. Practically, I should say, over 90 per cent. As I recall, about \$150,000 is required in South Pass, and the rest goes to the Southwest Pass improvement—the 35-foot project.

Mr. Frear. Is that amount large enough? I remember you made

a recommendation for more.

Col. Newcomer. We did ask, as I remember, for a little over \$2,000,000, but it was concluded in the consideration of this bill before that this would probably answer for one year; and I think that was probably right. It is desirable to expedite that work there as much as possible, because the jetties at South Pass are becoming more liable to damage, and of course we want to get Southwest Pass developed as fast as we can, and we require these inner jetties and the bulkheads as soon as we can get them.

The CHAIRMAN. Southwest Pass is the newer pass?

Col. Newcomer. Yes, sir.

Mr. Hulbert. Let me ask you: Why is it that such a large proportion of the number of vessels going in and out of the Mississippi

River continue to use the South Pass?

Col. Newcomer. Because that has been the more reliable channel. While it is not as deep sometimes as the other, it is a more reliable channel, and, of course, the pilots are familiar with it. And the work done at the other pass—the jetties were placed too wide apart, and the channel depends on dredging to too great an extent, and the dredges have not been able to keep the pass clear.

Mr. Hulbert. Southwest Pass? Col. Newcomer. Southwest Pass.

Mr. Hulbert. The South Pass accommodates about 90 per cent

of the shipping, does it not?

Col. Newcomer. Actually I presume it does carry that much, because the other project has really not been provided as yet.

Mr. HULBERT. It is completed, is it not?

Col. Newcomer. Oh, no, sir.

Mr. Hulbert. It is substantially completed?

Col. Newcomer. No; that is just the point. They found they could not get it by the original plan.

Mr. Frear. In that connection, Colonel: Will that South Pass

ever be able to carry much commerce?

Col. Newcomer. The South Pass?

Mr. Frear. Yes.

Col. Newcomer. Of course. South Pass now carries practically all the commerce.

Mr. Frear. I understand, but the purpose is to enlarge the South-

west Pass

Col. Newcomer. That is right; and it is expected, of course, when we get a 35-foot depth there, it is more than probable we can get along without the South Pass.

Mr. Frear. The South Pass is not to be abandoned?

Col. Newcomer. Oh, no; I judge not. Of course we won't attempt, at any considerable expense, to maintain a 30-foot depth there when we will have 35 feet through the other pass, but we will have to maintain it until we get the other open. Whether any work will be justified later on I do not know.

Mr. Frear. We have spent about equal amounts on both, haven't we?

Col. Newcomer. I really do not recall as to the relative expenditures. Of course South Pass was first improved at a considerable cost, and we have now taken up the other one, and we have spent, as I recall, something like eight or nine millions on it.

Mr. Frear. The appropriations have run over ten millions.

Col. Newcomer. Over ten millions; yes.

The CHAIRMAN. The next item: Bayous Lafourche, Terrebonne, Grossetete, Plaquemine, and Teche, La.: For maintenance, including

Grand River and Pigeon Bayous, \$64,000.

The next item: Waterway from the Mississippi River to the Sabine River, La.: For maintenance, \$7,000; for completing improvement from Mermentau River to Sabine River, Louisiana and Texas, in accordance with the report submitted in Senate Document No. 705, Sixty-fourth Congress, second session, and subject to the conditions set forth in said document, \$230,000; in all, \$237,000.

Mr. HULBERT. That is a new project, isn't it? Col. Newcomer. It is a new project; yes, sir.

Mr. Frear. Was that in the last bill?

Col. Newcomer. That was put in the bill in the Senate.

Mr. Frear. But it was not in the last bill as it passed the House?

Col. Newcomer. No, sir.

Mr. Frear. Do your engineers recommend that that should be improved?

Col. Newcomer. Yes, sir.

Mr. Frear. Did you the last time before the House?

Col. Newcomer. The report had not been prepared at the time the bill was considered by the House. It was an investigation made just a few months ago. A situation developed there calling for an investigation and I think the Senate Committee on Commerce called for a reexamination of that project and that investigation was made and disclosed conditions which indicated the desirability of very early work there. We now have a project for a 5 by 40 foot waterway from the Mermentau to the Sabine River. The part of it from the Calcasieu to the Sabine has been built and they have now established some shipyards in there and they have also made arrangements for the shipment of sulphur. There are two sulphur deposits in the United States, one here in Louisiana and the other over in Texas, and the locality is so much impressed with the necessity of getting those products out that they have offered to contribute onehalf of the cost of enlarging the waterway from the present size of 5 by 40 feet, which answers the purpose of the local tonnage; but they need for the greater tonnage a 9-foot depth.

Mr. Frear. This is under the preparedness program?

Col. Newcomer. Yes, sir.

Mr. Hulbert. You mean this is urgent as a part of the general plan of preparedness—this 5-foot depth?

Col. Newcomer. No; the 9-foot depth.

Mr. HULBERT. They won't be able to accommodate any vessels of the Navy?

Col. Newcomer. No; but they could carry the sulphur out and also

provide an outlet for the boats they are now building.

Mr. Dupré. In addition to the local proposition which the localities undertook, the Union Sulphur Mining Co. has agreed to complete, at its own expense, its connecting waterway?

Col. Newcomer. Yes.

Mr. Dupré. Requiring an expenditure of some \$250,000, which will enable the transportation of sulphur direct from the mine to Port Arthur.

Mr. Dies. Whereas it now goes by rail.

Mr. Dupré. Yes; and has to be transshipped there.

Before we leave that, I note with sorrow the omission from this item the appropriation included in the last bill of \$100,000 for an inland waterway from the Mississippi to Teche. I am of the same mind on that as Mr. Gray was this morning in regard to Mobile, but I assume from what you said that these omissions are made without regard to the merits of the projects left out?

Col. Newcomer. We did not consider that of such urgency, although

it is very desirable as to require an appropriation at this time.

The Chairman. The next item: Lake Pontchartrain, Pass Manchac, Bogue Falaya, Tchefuncta, Ponchatoula, Natalbany, Blood, Tickfaw, and Amite Rivers, and Bayou Manchac, La. For mainte-

nance, \$4,000.

Col. NEWCOMER. In connection with this item of Lake Pontchartrain, where we only propose funds for maintenance, there was in the bill as prepared before an item for a further improvement of Lake Pontchartrain by giving an 8-foot outlet at its eastern part, out to Lake Borgne and Mississippi Sound. We left that out in compiling this bill because it had not been presented to us in a way which indicated any special urgency at this time. It was a proposition, I think, reported nearly four years ago, and we were not aware of any recent development indicating any special urgency. There was brought to our attention yesterday, however, the fact that there has been established already a shipyard there, which is building 1,500-ton boats and which is going to build 2,500-ton boats, which probably would not be able to get out—that is, the larger boats—unless this channel is provided. And there is another shipyard which is going to be built on Lake Pontchartrain for the building of these bigger boats if this work is provided. A telegram has been sent to the district officer to get information on that point, and as soon as we have it we will present the information to the committee.

Mr. Frear. What is the fact there; it has only a very small depth,

hasn't it?

Col. Newcomer. Most of the communicating waterways have a project depth of 7 feet, but of course the lake itself has something more than that.

Mr. Dupré. It has an average depth of 15 feet.

Mr. Frear. This new project was to give a depth of 15 feet?

Col. Newcomer. No, sir; only 8 feet at the outlet, where it connects

with the Mississippi Sound.

Mr. Frear. Would it be the duty of the Government, if the shipyards are built in inaccessible places, to then dredge up to those places, or wouldn't it be the duty of the shipyards to build at places which are already accessible?

Col. Newcomer. Of course, a proposition for that depth, I believe, was made before the shipyards were built, and they have been able to get these small 1,500-ton boats out. But as I understand they now propose to build these larger ships, and they need the deeper

channel. The proposition does not involve the expenditure of much money; I think there is only \$32,000 involved there for this channel. It was included in the bill, and I presume those parties located there expecting the channel to be dredged to that depth.

Mr. Frear. I examined that at the time that project was recommended. Do you think that \$32,000 project will be sufficient to keep that channel open. It was put right across the lake, as I remember;

not along the side—it is right in the center.

Col. Newcomer. Oh, no; it is not in the center at all; it is at the eastern end, at the outlet of the lake into the Mississippi Sound, between—

Mr. Frear. And what is the length?

Col. Newcomer. I think it has a length of only a few thousand feet.

Mr. Dupré. It is between 1 and 2 miles, where there was a depth

varying from 3 to 6 feet.

Mr. Frear. It seems to me it is like Albemarle Sound or any other place, that a wash will follow with a change of winds, because it has not a well defined changel

not a well-defined channel.

Col. Newcomer. Of course, there will be further expenditures for maintenance involved. It will require about 10 per cent of this amount per annum for maintenance—10 per cent of the estimated cost of \$32,000.

Mr. Dupré. I will say this, that a favorable report had been submitted to Congress before those shipbuilding industries were located there, so that they went up there with the hope that Congress would subsequently do its duty.

Mr. Frear. I remember it was in last year, and I will ask the re-

porter to strike out my remark about that.

The CHAIRMAN. The next item:

Bayous Vermilion, Nezpique, des Cannes, Plaquemine Brule, and Queue de Tortue, Mermentau River, and Calcasieu River and Pass, Lousiana: For continuing improvement and for maintenance, including channel, bay, and passes of Bayou Vermilion, and tributaries of Mermentau River, \$51,000.

Mr. HULBERT. What is the continuing improvement provided for

there, Colonel?

Col. Newcomer. That is the Bayou Vermilion. I think there is a question which came up when this bill was under consideration before as to whether certain work which ought to be done on the upper river had been done or whether it was maintenance. We had it in as maintenance, under the impression it had been done at one time and allowed to lapse on account of lack of need for it at the time, but now there are a great many sugar plantations and industries like that creating a need for it, and we put it in as maintenance. But to clear up that ambiguity as to whether this was new work or maintenance we have put in here "continuing work and maintenance."

Mr. HULBERT. Is it urgent now as a matter of commercial necessity

or naval necessity?

Col. Newcomer. It is a commercial necessity—to take care of the commerce of this region.

Mr. Frear. That is an increase over the amount provided for last

year, is it not?
Col. Newcomer. No, sir. I think there was an increase made in the Senate.

Mr. Frear. It was \$46,000 in the House bill.

Mr. Dupré. There is \$5.000 more. You will see Calcasieu River and Pass has been added to it, and \$5,000 has been allotted for that

Col. Newcomer. That is right. I did not see that.

The CHAIRMAN. The next item:

Removing the water hyacinths, Alabama, Mississippi, Louisiana, and Texas; For the removal of the water hyacinth from the navigable waters in the States named in so far as it is or may become an obstruction to navigation, \$20,000.

Mr. Frear. Colonel, do we receive any aid in keeping out these water hyacinths from Florida or Louisiana, or the other States, or

from private parties, or does the Government do all of that?

Col. Newcomer. I do not understand anything has been done by Florida, but I know in Louisiana the localities do afford considerable help in this way, that these growths tend to accumulate and in that way finally clog the entire stream, and they have made arrangements down there with the people in that locality that the guards, and so forth, along the river shall keep these things in motion so they will move out with the tide and not accumulate and block up any one point. There is work of that kind being done.

Mr. Dupré. And, generally, to look after the booms. Col. Newcomer. Yes; the booms for catching them. They have contributed in that way. Of course, it is a very important matter to these people, because they are practically absolutely dependent, especially those engaged in the plantation industry, upon these streams for the handling of their traffic.

Mr. Frear. That is the reason I was asking if they assisted in

keeping them out of the rivers.

Col. Newcomer. They do assist in that way. I do not know

whether they appropriate any definite sums for it.

The CHAIRMAN. I have just been given some information on that by Mr. Brooker. He says on the Withlacoochee River there is a very large cooperation by the localities.

The next item:

Atchafalaya River, Louisiana: For maintenance, \$20,000.

Next item:

Sabine River, Louisiana and Texas, Sabine-Neches Canal, Harbor at Sabine Pass and Port Arthur Canal, and Johnsons Bayou, Louisiana and Texas: For maintenance, \$110,000; continuing improvement of Sabine Pass and Port Arthur Canal, \$3,000,000; in all, \$410,000.

Mr. Hulbert. What is the urgent necessity, Colonel, for continuation of the improvement of Sabine Pass and Port Arthur, in this bill?

Col. Newcomer. There is an enormous export of oil made from that place, and those boats, of course, like all others, are increasing in size, and it is important that they be allowed to carry full loads.

Mr. Switzer. This does not include that logging proposition in the

Sabine River?

Col. Newcomer. No. sir; that has been cut out.

The CHAIRMAN. Next item:

Red and Sulphur Rivers. Arkanses and Texas, and Cypress Bayou, and waterway between Jefferson, Texas, and Shreveport. Louisiana: For maintenance. \$5,000.

Next item:

Galveston Harbor, Galveston Channel, Port Bolivar Channel, Texas City Channel, and Houston Ship Channel, Texas: For maintenance, \$480,000.

Mr. Frear. Those are lumped together. What are the specific sums allotted to each, in order that we may have an understanding about that?

Col. Newcomer. The Galveston Harbor, maintenance, is \$50,000; Galveston Channel, \$100,000; Texas City Channel, \$50,000; and Port Bolivar Channel, \$30,000; and Houston Ship Channel, \$250,000.

Mr. Frear. Did we receive contributions for that Houston Ship

Channel, or do we receive contributions now?

Col. Newcomer. Not for maintenance.

Mr. Frear. Not for maintenance?

Col. Newcomer. No, sir. Of course, they contributed to the construction of the dredges which we use in maintenance, but they do not contribute funds.

The CHAIRMAN. The next item:

Port Aransas, Texas: Continuing improvement and for maintenance, \$100,000.

Next item:

Anahuac Channel, mouth of Trinity River, Oyster and Clear Creeks, and Cedar, Chocolate, Turtle, Bastrop, Dickinson, Double, and East Bay Bayous, Texas: For maintenance, \$33,300.

Mr. FREAR. That is the only place where the Trinity River figures, I see?

Col. Newcomer. Yes, sir.

The CHAIRMAN. The next item:

Waterway from Galveston to Corpus Christi and channel from Pass Cavallo to Port Lavaca, Texas: for maintenance, \$90,000.

Mr. Frear. That is that canal, isn't it?

Col. Newcomer. Yes, sir.

Mr. Frear. That 5-foot canal?

Col. Newcomer. Yes, sir.

Mr. Frear. Is that very necessary? What is that—a case of naval necessity, or what?

Col. Newcomer. Oh, no, sir; that is simply——

Mr. Frear. A commercial necessity?

Col. Newcomer. It is considered so—a commercial necessity. Of course, part of it is more than 5 feet. The channel through the canal from Galveston down to Aransas Pass is a 5-foot project; from Aransas Pass across to Corpus Christi it is a 12-foot project. Those localities have attempted to use it and do use it to some extent.

Mr. Frear. There is not very much commerce on that?

Col. Newcomer. Not very much.

Mr. FREAR. And this is just for maintenance?

Col. Newcomer. Yes, sir.

Mr. Frear. About how long is that canal?

Col. Newcomer. I judge it is about 180 miles—that is, I mean the whole distance between the points. Of course, it is not all improved and not all worked over.

Mr. Frear. You mean it is not all connected?

Col. Newcomer. It has a sufficient natural depth over a great deal of the distance. Matagorda Bay, for instance, has a natural depth of more than 5 feet.

Mr. Dies. There is nothing between Port Arthur and Galveston. Col. Newcomer. No: there is nothing there: this runs from Galveston to Corpus Christi.

The CHAIRMAN. The next item:

Freeport Harbor, Texas: For maintenance of mouth of Brazos River, \$66,000; for improvement in accordance with the report submitted in House Document Numbered Fourteen hundred and sixty-nine, Sixty-third Congress, third session, and subject to the conditions set forth in said document, \$150,000; in all, \$216,000.

Mr. Hulbert. What did you consider, Colonel, was the special

urgency for taking on this new project just now?
Col. Newcomer. This is a sulphur proposition. The shipments of sulphur have increased very largely and they find themselves very much hampered, indeed, to get out with the 18-foot depth which they have now.

Mr. HULBERT. And this provides for what depth?

Col. Newcomer. Twenty-four feet.

Mr. Hulbert. Will a 24-foot depth be sufficient?

Col. Newcomer. That is all they have asked for at the present They claim that with that increased depth, for the range of tonnage available, they could handle the tonnage.

Mr. Hulbert. Where is most of this sulphur transported?

Col. Newcomer. I do not recall. It is delivered along the coast.

but just where I do not know.

Mr. Costello. I presume the increased demand for sulphur is practically due to the war. The war practically debarred any importations along that line?

Col. Newcomer. Yes, sir.

Mr. Costello. And we have resorted to our own natural resources so as to get sulphuric acid and the other supplies for the making of

munitions?

Col. Newcomer. That is right. Of course the Italian supply of sulphur and the Spanish supply of pyrites is now practically cut off and we have to rely upon these two deposits—the one in Louisana and the other here on the Brazos River in Texas—for our supply of sulphur.

Mr. Costello. Prior to the war it was not a profitable transaction

to operate these mines?

Mr. Dies. Oh, yes it was.

Mr. Costello. Not to a very great extent. But since the war, they have been able to do a profitable business there and the probability is that with the increased facilities and the finances which they will get in due to the present increased demand, that they will be able to continue after the war has closed, so that we are building up a very important industry by making this improvement.

The CHAIRMAN. The next item:

Red, Black, Ouachita, Tensas, Bouef, and Salina Rivers, and Bayous Macon, Bartholomew, D'Arbonne, and Corney, Arkansas and Louisiana: For mainte-nance, \$65,000. The balance of appropriations heretofore made for the construction of Lock and Dam Numbered Seven, Ouachita River, Arkansas and Louisiana, is hereby made available, in the discretion of the Secretary of War, for the construction of Lock and Dam Numbered Five.

Mr. Frear. What is the purpose of the transfer, Colonel?

Col. Newcomer. It has been found it would be very much more advantageous to build Lock and Dam No. 5 next rether than to build Lock and Dam No. 7. Locks and Dams Nos. 2, 3, and 4 are practically completed and give navigation up to Monroe. Six and 8 have been completed, and if we put in 5, we will connect up with pool 6 and give it an outlet to the Mississippi. It is possible that No.*7 will not be required, as changes in 6 and 8 and dredging

may carry the channel to Camden.

Mr. Frear. What is the total amount you estimate for the project? Col. Newcomer. We do not have any revised estimate for the entire improvement. The last appropriation carried, I think, from \$2±0,000 to \$250,000, for Lock and Dam No. 7, which we now propose to apply to 5, and I think it will take probably in the neighborhood of \$300,000 more to complete that dam. Now, it is expected certain changes can be made in 6 and 8 and combined with dredging above, so that we may not have to build any more locks and dams. The district officer has been investigating that proposition but he has not submitted a report to the department and of course we are not able to speak with personal knowledge upon that point. But he has expressed that opinion, however, himself. The project involved, according to the original plan, the construction of three more locks and dams, Nos. 5, 7, and 9.

Mr. Frear. Up to this time there is very little commerce down on

that river?

Col. Newcomer. Very little; yes, sir.

Mr. Frear. And we have spent over \$4,000,000, as I remember?

Col. Newcomer. That is because, unfortunately, it was carried out in this way. They would first put a lock and dam in Louisiana and then another one in Arkansas; then another lock and dam in Louisiana, and another one in Arkansas; and the consequence is that these have been built isolated in this way and do not give any continuous communication. We now have at the Louisiana end continuous navigation up to Monroe, La., and the work certainly ought to be carried continuously from that point up, because the outlet is into the Red, Black, and Mississippi Rivers.

Mr. Dupré. Has not the final completion of the dam at the mouth developed considerable navigation from Monroe down to New

Orleans?

Col. Newcomer. We have not any report indicating the result of that yet. As a matter of fact, No. 3, I think it is, is just being completed, but I do not know definitely about that.

Mr. Dupré. I happen to know there has been an additional steam-

ship line put on since this end was available.

The CHAIRMAN. The next item:

Arkansas River, Arkansas and Oklahoma: For maintenance by snagging operations, \$35,000.

Next item:

Black and Current Rivers, Arkansas and Missouri; White, Saint Francis, and L'Anguille Rivers, and Blackfish Bayou, Arkansas: For maintenance, \$28,700.

Next item:

Cumberland River, Tennessee and Kentucky: For maintenance above Nashville, \$5,000; continuing improvement below Nashville, \$632,000; in all, \$637,000.

Mr. Hulbert. Is the necessity for continuing the improvement below Nashville commercial?

Col. Newcomer. That is mainly commercial; ves, sir. You have already authorized there the beginning of the construction of several locks and dams, and we usually build the locks and abutments of the dams first, and then additional money is required in order to put in the remaining work to make that available. This is to give an outlet from Nashville to the Ohio River; and, of course, we have already completed the improvement to some extent above Nashville.

Mr. Frear. The new project has been left out?

Col. Newcomer. The new project above Nashville has been omitted. Mr. FREAR. Is that as important, do you think, as the one hereof comparative importance with the one above Nashville?

Col. Newcomer. No, sir; we did not consider it so. The Chairman. The next item:

Tennessee River, Tennessee, Alabama, and Kentucky: For maintenance and continuing improvement, \$401,000.

Mr. Frear. What is the character of the continuing improvement

contained in that, Colonel?

Col. Newcomer. This is for the work principally on the open channel which is in progress on that river. You see, we have the section above Chattanooga; then Chattanooga to Riverton and Riverton to the mouth. From Riverton to the mouth the funds on hand will probably be sufficient to complete. And between Florence and Riverton there is remaining work to be done, and then the dam at Bellefonte below Chattanooga. The lock and dam work is being held up by reason of the failure so far to comply with certain conditions imposed on the localities to handle the flowage damage. There was a proposition to build one high dam or two dams of smaller lift below Hales Bar, and when Congress authorized the change from one high dam to two low ones it provided that the localities should pay the cost of the flowage rights or damages, which we found on investigation to be much more expensive than first anticipated for the high dam.

Mr. Frear. This is not for power purposes in any way? Col. Newcomer. This does not involve that except as the high dam might afford an opportunity for some power development.

The CHAIRMAN. The next item:

Toledo, Port Clinton, Sandusky, Huron, Vermilion, Lorain, Cleveland, Fairport, Ashtabula, and Conneaut Harbors, Ohio: For maintenance, \$132,000, completing improvement of Lorain Harbor in accordance with the report submitted in House Document Numbered Nine hundred and eighty, Sixty-fourth Congress, first session, and subject to the conditions set forth in said documents, \$16,500. For improvement of Cuyahoga River, Cleveland Harbor, in accordance with the report submitted in House Document Numbered Seven hundred and seven, Sixtythird Congress, second session, and subject to the conditions set forth in said document, \$5,000: Provided, That the Government's share in the cost of the improvement in accordance with the final plans adopted shall not exceed \$400,000; in all, \$153,500. The unexpended balances of appropriations heretofore made and authorized for the improvement of Conneaut Harbor, Ohio, are hereby made available for completing improvement in accordance with the report submitted in House Document Numbered Nine hundred and eighty-three, Sixty-fourth Congress, first session.

Mr. Frear. May I ask there, Colonel—it says that the Government's share in the cost of the improvement in accordance with the final plans adopted shall not exceed \$400,000—what portion of this fund goes into that project that is mentioned?

Col. Newcomer. Only \$5,000. The situation there is this, that the Cuvahoga River carries now a considerable commerce for a number of steel mills and other industries located along that stream, but the channel is very tortuous and the bigger boats can not get up to those mills. The city of Cleveland has in contemplation a project which involves a number of cut-offs, a very expensive work, and involves the destruction of a number of plants, in order to clear the way for us, and a considerable cost, of course, for dredging, bulkheads, and so on. An examination of that was authorized by Congress, and as a result of our investigation a report was made to Congress stating that a definite plan at that time could not be prepared on account of certain difficulties they had encountered about rights of way and things of that kind. And they recommended an appropriation of \$5,000, which would enable the Government to cooperate with the city in devising plans which would be practicable for making this improvement. It came out in that investigation, for instance, that the dredging would, apparently, be the proper share for the Government to assume, putting all other expenses, for the purchase of land rights, bridges, and bulkheads, amounting to a very much larger sum, on the locality, and that expense of dredging, as I recall, was something in the neighborhood of \$390,000. So that when this item was considered by the Senate committee they inserted in the bill as it was submitted to the Senate a statement that would serve notice on the community that in any plan that might be developed they would not want the Government considered to be obligated to go beyond such an expenditure.

Mr. Frear. That would be \$390,000 more?

Col. Newcomer. Provided the plan is adopted along this line.

Mr. Frear. Isn't this the same project that was struck out from the 1915 bill in the House? I think that is the one where it was claimed it was for the benefit of private parties that this extension

was to be made.

Col. Newcomer. I do not recall at all about that; I did not have any connection with this at that time. I hardly think it could be for the interest of private parties. There is this feature, of course, that heretofore the improvement of the Cuyahoga River has been done entirely by the locality; the Government has confined its expenditures to the outer harbor—not entirely to the outer harbor, because we had a project on the river up to the first bridge. But above that point, where this work is expected to be done, it has been handled by the State, and they felt in making this very elaborate improvement, which involved a much larger cost, that the Government ought to cooperate, and it was thought it would be well if the Government cooperated in that way. But this project involves now only an expenditure of \$5,000, and Congress is to make further appropriation as estimates are submitted to it hereafter.

Mr. Frear. Was that in the bill last year?

Col. Newcomer. No, sir; only in the bill as passed by the Senate committee. It was not in the House bill.

The CHAIRMAN. The next item:

Ohio River. Continuing improvement by the construction of locks and dams with a view to securing a navigable depth of nine feet, \$5.000.000. Upon the recommendation of the Chief of Engineers and the approval of the Secretary of War the project for the improvement of the Ohio River may be so modified as to

permit the construction of one lock and fixed dam to replace locks and dams numbered one and two, should such modification be deemed desirable and advantageous.

Mr. Hulbert. Would that be a costly proposition, Colonel? Col. Newcomer. No; it will probably be a matter of economy, in this way: Lock and Dam No. 1 was built many years ago. began the construction of that dam in 1875 and completed it in the eighties, and it is a movable dam and, like all dams of that type, of course it is subject to deterioration of a more rapid character than a fixed dam. It has been partially made obsolete also by changing this from a 6-foot to a 9-foot project. Dam No. 3 was raised 3 feet. In doing that, the change was made after the foundation of the dam was built, and we simply changed the movable parts; for instance, we lengthened out the wickets and props and things of that kind, so that we do not have a normal type of construction there. And Dam No. 2 is deteriorating rather rapidly, and the people of Pittsburgh who insisted originally that no dam of a fixed character should be placed below the harbor, on account of getting out with the coal boats, are now quite content to have these two replaced by a fixed dam and probably to have a number of others in the upper river if the situation should justify it in the future.

Mr. Switzer. And making a larger harbor, too, wouldn't it?

Col. Newcomer. Yes, sir—throwing this dam further down the river than Dam No. 1.

Mr. Frear. Can you just give a statement of how many dams have been built there—those that have been built and those that are being

Col. Newcomer. The dams are practically completed down to No. 18, and work has been authorized on all down as far as No. 30. Below that the alternate dams have been begun down as far as Louisville, and then there are two begun below Louisville. In other words, out of a total of 53, it is my impression about 35 have been begun.

Mr. Frear. The work is over half finished, do you think—the

locks and dams?

Col. Newcomer. Well, I should judge approximately half finished. I think, as a matter of fact, the last annual report gives it as 45 per cent completed.

Mr. Switzer. A number of dams below No. 18 have been finished—

No. 26, for instance.

Col. Newcomer. Oh, yes; several of them are finished. No. 37 is finished and, of course, Dam 41 is finished, but work is still in progress in the canal at Louisville. There are several of them nearly finished below there and we are now getting quite a stretch of continuous slack water. The upper river is finished and we are connecting up that section with the Muskingum, Little Kanawha, and Great Kanawha Rivers.

Mr. Frear. It has helped navigation there thus far, do you think? Col. Newcomer. Yes, sir. There is one thing I think I ought to mention here, which I do not believe I did before, with reference to these larger projects like the Ohio, upper Mississippi, and Missouri. I supose the committee are all familiar with the fact that in those three projects the Government committed itself, by enactment of law, to a certain definite program of construction. On the Ohio River, for example, it provided in 1910 for the completion of the project in 12 years, and the same way on the upper Mississippi, and on the upper Missouri it provided in 1912 for completion in 10 years. In other words, it has provided for the completion of all those three by 1922. Unfortunately, from our point of view, Congress has taken the view that this means completion of the appropriations by that time and not the completion of the work; in other words, that instead of providing the money fast enough to complete the work by 1922, it means the making of all appropriations by that time. In these cases the department has not felt free to eliminate items where Congress itself has pleged itself to a certain program of construction.

Mr. Frear. How much has been spent, generally speaking, on the

Ohio River itself, if you know?

Col. Newcomer. In the neighborhood of \$30,000,000.

Mr. Frear. You mean on this project?

Col. Newcomer. On the new project, yes. There has been more than that, of course, spent on all work, including the previous project—something like \$45,000,000 all together. It is going to take, as I recall now, \$33,000,000 more, including this \$5,000,000 to complete it accordance with the estimated cost. The total work will cost, in round numbers, \$75,000,000.

Mr. Frear. Will it be completed within the estimates, do you

think? Is that the indication?

Col. Newcomer. It is a pretty rash thing to say that under the present conditions. We were hoping it would; but of course under the present unsettled conditions we could not do it. There are several features that will enter into the work that may, however, help it. One is this, that in the lower river, for instance, we may find it practicable and preferable to substitute the use of dredging below Dam 48, which is the lowest one now, just below the Green River. Below that point it may be found practicable not to build dams but rely upon dredging. The river is very wide and we are faced with conditions which are more difficult to handle because of the large amount of sand and its movement in sand waves. That point has not been decided definitely. Of course, if we do omit the dams down there, that will be a very substantial saving in the cost of construction.

Mr. Frear. That will take out from seven to five dams?

Col. Newcomer. Something like that; yes, sir. Mr. Switzer. Then, didn't you eliminate one——

Col. Newcomer. We eliminated No. 42 and we expect to eliminate No. 39 above Louisville.

Mr. Frear. And to reach the same results by dredging?

Col. Newcomer. That is what we hope on the lower river. That matter was investigated by the same board that reported in favor of the dams as against dredging; but on further consideration of that matter we are inclining to the opinion that it may be found advisable to substitute dredging on that lower stretch of the river.

The CHAIRMAN. The next item:

Grand Marais, Marquette, Marquette Bay, and Ontonagon Harbors, and Keweenaw Waterway, Michigan; Ashland and Port King Harbors, Wisconsin; Duluth-Superior Harbor, Minnesota and Wisconsin; Agate Bay and Grand Marais Harbors, Minnesota. For maintenance, \$175,000; completing improvement of Ashland Harbor in accordance with the modified plans in the report submitted in House Document Numbered Sixteen hundred and ninety-eight, Sixty-fourth Congress, second session, \$10,000; in all, \$185,000.

Mr. Frear. Could you give the amounts, in a general way, without

referring to your notes, for those different harbors?

Col. Newcomer. The Grand Marais Harbor of Refuge, \$10,000 for maintenance; Ashland Harbor—that item has not been changed; Duluth-Superior Harbor, maintenance, \$45,000; Keweenaw Waterway, \$105,000.

Mr. Frear. Was that the Keweenaw?

Col. Newcomer. Keweenaw Waterway was \$105,000. That has hitherto been maintained under the indefinite appropriation for operating and care, but it was deemed advisable to put it in the regular river and harbor appropriation, because it has no lock in it. I think that covers all of the items. There is no change at all; it is simply a grouping together and summing up of the items.

The CHAIRMAN. The next item is:

Saint Joseph Harbor and River, Saugatuck Harbor and Kalamazoo River, South Haven, Holland, Grand Haven, Muskegon, White Lake, Ludington, Manistee, Portage Lake, Arcadia. Frankfort, Charlevoix, and Petosky Harbors, and Grand River, Michigan: For maintenance, \$112,050; continuing improvement of Manistee Harbor, \$28,700; in all, \$140.750.

The CHAIRMAN. The next item is:

Mackinac, Cheboygan, Rogers City, Alpena, Harbor Beach, and Monroe Harbors, Saginaw, Black, Clinton, Rouge, and Detroit Rivers, Michigan: For maintenance, \$13,500; for improvement of Harbor Beach Harbor in accordance with the report submitted in House Document Numbered Seventeen hundred, Sixtyfourth Congress, second session, \$100,000; in all, \$113,500.

Col. Newcomer. The words "and Detroit" should be omitted from that item.

Mr. Frear. What was the necessity, Colonel, for this improvement of Harbor Beach Harbor?

Col. Newcomer. That is in order to make that harbor available as a refuge for the big boats.

Mr. Frear. Was that in the last bill?

Col. Newcomer. I think that was in the bill as it passed the House; yes, sir.

Mr. Frear. What page? Oh, yes; I see; it is on page 38.

The CHAIRMAN. Colonel, just to have it in the record, I have had a number of letters inquiring about the probable action of the committee with regard to the new improvement of Rouge River.

Col. Newcomer. We did not include that in this bill.

The CHAIRMAN. The next item is:

Ship channel connecting waters of the Great Lakes between Chicago, Duluth, and Buffalo: For maintenance, \$185,000.

Col. Newcomer. And if you will please insert after that "including St. Marys River"—I simply wrote it up at the top of the page myself—"including St. Marys River, St. Clair River, the channels in Lake St. Clair, and Detroit River, Michigan"; that makes a better grouping than I had before.

The CHAIRMAN. The channel in Lake St. Clair?

Col. Newcomer. Lake St. Clair. Mr. Booher. And what other river?

Col. Newcomer. And Detroit River, Michigan. It does not make any change in the sum.

The CHAIRMAN. The next item is:

Manistique Harbor, Michigan, Menominee, Oconto, Green Bay, Algoma, Kewaunee, Two Rivers, Manitowoc, Sheboygan, Port Washington, Milwaukee, Racine, Kenosha, and Waukegan Harbors, Sturgeon Bay and Lake Michigan Ship Canal, and Fox River, Wisconsin: For maintenance, \$52,100. The project for the improvement of Green Bay Harbor, Wisconsin, is hereby modified to include the maintenance of the turning basin at Depere in accordance with the report submitted in House Document Numbered One thousand and seventeen, Sixty-fourth Congress, first session.

Mr. Frear. How does that happen to be mentioned especially,

Colonel? Is there any work being done on that now?

Col. Newcomer. We have now two projects, one for the Green Bay Harbor, which includes a section of Fox River, and then for harbor at Depere itself. This is to consolidate them and carry them as one.

Mr. Frear. There is no work being done on either at this time, is

there?

Col. Newcomer. There is work of maintenance. Mr. Frear. This is intended to cover both?

Col. Newcomer. Yes, sir. Really the harbor at Depere is simply a turning basin at the end of the channel, which is a part of the harbor of Green Bay, and they ought to be one project and not two different projects.

Mr. Dupré. Is there not a Cheboygan in Michigan and a She-

boygan in Wisconsin; is not that correct?

Col. Newcomer. Yes; that is right.

Mr. Dupré. You will notice it at the bottom of page 19.

Col. Newcomer. Yes; that is right. The Chairman. The next item is:

Saint Croix River, Wisconsin and Minnesota, Minnesota River, Minnesota, Lake Traverse, Minnesota and South Dakota, Red River of the North, Minnesota and North Dakota, Warroad Harbor and River, Zippel Bay, and Lake of the Woods, Minnesota: For maintenance, \$3,000.

Mr. Frear. Where are those amounts taken from?

Col. Newcomer. I think that is practically all—Warroad Harbor and River, \$2,000, and Zippel Bay, \$1,000. The other items have no proposed expenditure.

The Chairman. The next item is:

Chicago and Calumet Harbors, Chicago and Illinois Rivers, Illinois, Calumet River, Illinois and Indiana, Indiana and Michigan City Harbors, Indiana: For maintenance, \$115,000; completing improvement of Indiana Harbor, \$395,200; in all, \$510,200.

Mr. Frear. What is that last project, Colonel? Col. Newcomer. That is the outer breakwater.

Mr. Frear. In Indiana Harbor?

Col. Newcomer. Yes, sir. The outer harbor there is being protected by a breakwater, and this is for the completion of that work.

Mr. Frear. Is that a very important project?

Col. Newcomer: Yes, sir.

Mr. Frear. That has to be finished at this time?

Col. Newcomer. It is very desirable to finish it. Of course, you know there are very large steel plants at the mouth, having their docks right at the opening into the river.

Mr. Switzer. Is that not near Gary? Col. Newcomer. Yes; it is near Gary.

Mr. Frear. I remember the question was raised about that by one of the Illinois Members the last time, and he criticized it very severely.

Col. Newcomer. They have a very large tonnage of iron ore, par-

ticularly at this place.

Mr. Świtzer. I think his criticism was because the docks were being used by some corporation, for the benefit of some corporation.

Mr. Frear. Yes; that is right. This was not in the last bill, was it?

Mr. Hulbert. Yes; it was.

The CHAIRMAN. The next item is:

Mississippi River, from the mouth of the Ohio River to and including the mouth of the Missouri River: Continuing improvement and for maintenance, \$350,000.

Mr. Frear. What is the character of the improvement there? Col. Newcomer. That is for maintenance of the 8-foot channel.

Mr. Frear. That is just for maintenance?

Col. Newcomer. Yes, sir.

Mr. Frear. That has been established, has it not; that is, com-

pleted?

Col. Newcomer. The project really has not been completed in this way. It involves an additional fixing of the channel by means of dikes and bank revetments. That work had been proceeding for a number of years before they found that they can maintain the 8-foot depth by the use of dredges. Of course, the project contemplates going ahead and putting in these additional revetments and training walls or dikes, so as to reduce the cost of maintenance by dredging, but under present conditions we thought it would be better not to proceed with the project. In other words, the commerce that is on that river hardly appeared to justify the expenditure of a million dollars and more that they had been regularly providing for this improvement for several years, and we find we can maintain the depth with the dredges, and for that reason we have temporarily discontinued further operations.

Mr. Frear. I understand that on 200 miles of that river there has

been about \$18,000.000 spent.

Col. Newcomer. There has been a very large expenditure made.

Mr. Frear. That is the one on which Senator Burton said there had been more spent than on the entire Rhine River, and the Rhine River had 14,000,000 tons, and of course this point of the river is insignificant. I think it has altogether 153,000 tons. as given by Col. Thompson.

Col. Newcomer. The tonnage has been diminishing rather than growing. At one time there was a substantial tonnage there, but it

has been diminishing.

Mr. Dupré. Is that the matter reverted to by Mr. Kennedy this

morning?

Col. Newcomer. No; this is below the Missouri and the other is above the Missouri. That is the next item he is referring to.

The CHAIRMAN. The next item is:

Mississippi River from the mouth of the Missouri River to Minneapolis, Minnesota: Continuing improvement and for maintenance, \$1,200.

Mr. Frear. That is the one Mr. Kennedy referred to. We spent something like \$28,000,000 on that, where only one line of boats run four months in the year.

The Chairman. I might mention, for the information of the committee, that there is at present quite an active movement in the Mississippi Valley States, particularly in view of the national stress, to develop water carriers on the Mississippi River and its tributaries. A meeting has been called for May 8 and 9, to be held at St. Louis, at which the governors of a number of the States expect to be present, and also representatives of the commercial organizations, and they have been in communication with the Chief of Engineers about it.

Mr. Frear. Do you feel, Colonel, that it is possible to ever secure any appreciable commerce on that river until we control the railroad

rates?

Col. Newcomer. I think it will be necessary probably to enforce a change in the policy that the railroads have ordinarily pursued in the past of not prorating with the boat lines, and steps have already been accomplished in that direction. I just saw in the last issue of the Railway Review the statement of a decision of the Interstate Commerce Commission, just recently handed down, requiring a railroad at St. Louis to prorate with the boat line that is running between St. Louis and Memphis and New Orleans, on the same basis that it prorates with its rail connections. That has been one of the difficulties in the past that has hampered, of course, river traffic. For instance, the Kanawha River ships most of its coal, you might say, to the Cincinnati market, and a great deal of coal from the Kanawha Basin goes to localities that are reached by rail from Cincinnati. The Cincinnati railroads, or roads leading out from Cincinnati, charge the local rates to any coal traffic offered them by boat, by water carrier, whereas they would receive coal delivered by rail connection and prorate with them on a basis that would enable them to deliver cheaper than the sum of the local rail-and-water rates. Of course, if you require the rail carrier to prorate with the water carrier on the same terms he does with the rail carrier, you will have competition that will enable the water carrier to do business.

Mr. Frear. There might be direct competition between water carriers. For instance, there would be between Minneapolis, St. Paul,

and St. Louis.

Col. Newcomer. We can expect to develop considerable commerce on the water between communities along side of the water that do not involve rail carriers, but if you are going to get any very large development there that will have to be partly by water and partly by rail, it is essential to give equal treatment in order to live.

Mr. Frear. Commerce has decreased about 90 per cent on that

river.

Col. Newcomer. It it very much less than it used to be.

The CHAIRMAN. The next item is:

Mississippi River between Saint Paul and Minneapolis, and between Brainerd and Grand Rapids, Mississippi and Leech Rivers, and reservoirs at headwaters of Missispipi River: For maintenance, \$2,000; continuing improvement of Mississippi and Leech Rivers, \$50,000; in all, \$52,000.

Mr. Hulbert. None of these last three items have been urged except because of their commercial activity?

Col. Newcomer. That is substantially so.

The CHAIRMAN. The next item is:

Osage and Gasconade Rivers, Missouri, and Kansas River, Kansas: Continuing improvement and for maintenance of Osage and Gasconade Rivers, \$20,000; com-

pleting improvement of Kansas River in accordance with the report submitted in House Document Numbered Five hundred and eighty-four, Sixty-third Congress, second session, and subject to the conditions set forth in said document, \$10,000; in all, \$30,000.

The next item is:

Missouri River: For maintenance and continuing improvement with a view to securing a permanent six-foot channel between Kansas City and the mouth of the river, \$1,000,000; for snagging and maintenance between Kansas City and Sioux City, \$35,000; for maintenance between Sioux City and Fort Benton. \$50,000; in all, \$1,085,000.

Mr. Booher. Now, the maintenance between Kansas City and Sioux City and between Sioux City and Fort Benton have been reduced, or are they the same?

Col. Newcomer. The maintenance is the same, I think.

Mr. Booher. I see; it is the same.

Now, the next item, Colonel, is stricken out. I am not faultfinding, but I am investigating. Why did you strike out the \$25,000 for completing that improvement near St. Joseph?

Mr. Dupré. It is at the top of page 39, line 7.

Col. Newcomer. Well, we did not consider that as of any sub-

stantial importance as a commercial or defense proposition.

Mr. Booher. Well, don't you think it is very necessary to save the work that you have done there now, where the people have paid \$50,000, and the Government has put in \$75,000?

Col. Newcomer. Well. I do not know to what extent that work

would be necessary.

Mr. Booher. Here is the situation there, Colonel. You know there is about 3 or 4 miles of revetment commencing north and west of St. Joseph, and running down to perhaps 2 miles below the city of St. Joseph.

Col. Newcomer. I know in a general way.

Mr. Booher. Now, when they commenced work there to prevent the river from going into the lake they did not commence at the lower end of the revetment, but just as far down as they possibly could, and they built it down there, and it is one of the finest revetments I ever saw. But if this river begins to cut through here at the head of this new work, as it is very likely to do and as it always has done, that is going to be an entire loss—that \$125,000. I am very much afraid that when the June rise comes in the river we will lose that revetment.

Col. Newcomer. Of course certain work could be done of an emergency character under an emergency appropriation. We did not understand this was work of special importance from the point of

view of the navigation of the river.

Mr. Booher. Well, it is not, unless you want to save this \$125,000 that has been put in there. Now, those people are not able to raise a dollar more down there. They raised \$50,000 for that work. They are a set of gardeners, very small farmers, and they could not raise another \$1,000 to save their necks, and the estimates of your boards have always been that it would take \$150,000, and the people were to raise half of it in the first instance, but they could not do it to save their lives. They raised \$50,000, and they could not go any further, and the Senate released them from the \$25,000, and we made an appropriation in the bill and gave them an extra \$25,000. I know

that old stream so well that I am afraid the \$125,000 will go into the river, because when it once commences cutting you know it cuts mighty fast when it starts, and it seems to me, although it is not an emergency for navigation, and it is not an emergency for preparedness, yet it occurs to me that it is the very breath of emergency to save what you have done there. We have spent \$125,000 there, and I am afraid now, if you do not connect those two revetment works together, that you are going to lose what you have done.

Mr. HULBERT. Mr. Chairman, I recall very well the hearing we had on that matter, and we had maps here showing the situation, and it looks to me, as Judge Booher says, that it is a matter of spending

\$25,000 to save the greater part of \$125,000.

Mr. Switzer. There is also grave danger of cutting through as I understand it.

Mr. HULBERT. If it cuts through, one of the principal towns of that section will be left entirely off the river.

Col. Newcomer. I do not think the department has ever felt any grave apprehension about its cutting through in that locality.

Mr. BOOHER. Do you know that it went through within 19 feet last

spring—just 19 feet?

Col. Newcomer. What I mean is that even cutting into the lake does not mean that the river would desert its old course and go down that way. We have so many cases where the river does go around.

Mr. Booher. It formerly ran down through that lake, Colonel.

Col. Newcomer. At one time it was an old river bed.

Mr. Booher. It is just a stream of lakes, coming down one after another, from St. Joseph to north of Kansas City, within 11 miles of Kansas City, and these lakes will not be higher on the other side of that lake than it is the other way, and the Missouri River does not run up; it goes down, and quite fast.

Mr. Kettner. Mr. Chairman, can we not submit this or pass some sort of resolution to have Judge Booher take it up with the Chief

of Engineers?

Col. Newcomer. I will speak to the Chief of Engineers about it, if you wish me to do so. We do not object to having the item in there, if you wish to put it in, although it did not appear to us to be an

item that would be justified.

Mr. Booher. It is only to save the money that the Government has put in and these people have put in. Your engineer may be right, but every engineer that has made a report on that, except the last board, reported that it would go back down the old channel of the river, and that it would be below the old channel connecting the Missouri River away down below. If it does it, it will destroy a lot of very valuable land and property.

The Chairman. Without objection, if I may interject at this point, Col. Newcomer will be requested to look into the matter fur-

ther and report to the committee to-morrow.

Col. Newcomer. Very well; it is a question of what time you want me to-morrow and what time I leave to-night. Of course, I will have to get in touch with the Chief of Engineers in the meantime.

Mr. Booher. I am anxious to save that money, both for the people

and the Government.

Mr. Gray. Mr. Chairman, can you not include my little project in that?

Col. Newcomer. I will be very glad to take it up with the Chief

of Engineers.

The CHAIRMAN. Without objection, the Colonel will be requested to take up your project with the Chief of Engineers with the same

Mr. Frear. I notice there is \$35,000 for maintenance from Kansas Mr. Frear. I notice there is \$35,000 for maintenance from Kansas City to Sioux City. I want to ask whether that is for preparedness or for commerce. According to page 7673 of the report the commerce was 101,822 tons last year, of which 100,335 tons was sand hauled 2 miles. That leaves about 1,000 tons. You have spent already \$3,235,000 on this stretch. I was just wondering whether or not that was put in on account of preparedness or on account of

commerce?

Col. Newcomer. I guess it would be a little bit hard to defend it on either one of those grounds, except in this way: That it has been deemed advisable on that upper Missouri River to keep the snag boats going and keep the stream clear. There is a little local movement of traffic at a number of points, and we want to avoid the accumulation of snags blocking the channel and the obstruction of the stream in that way, so that wherever there is a tendency or desire to use the stream they can do so, so far as the natural condition of the channel will permit.

Mr. Frear. That question was just preliminary to the next question. In view of that fact, I was going to ask, Was the \$1,000,000 between Kansas City and the mouth of the river put in because of

commercial necessity or preparedness there?

Col. Newcomer. That, of course, was in order to carry out the program adopted by Congress for the improvement of that stretch within a period of 10 years. We have there, however, a navigation company in action, transacting business. It is probably doing it on more hopeful lines than anywhere else on our western rivers. In other words, they have arrangements whereby they receive shipments on railroad sidings, transfer them to boats, and transport them over this stretch of the river, and deliver them on cars or railroad sidings at the other end of the route. They are handling that in a thoroughly efficient and businesslike wav.

Mr. FREAR. That is at the present time?

Col. Newcomer. Yes.

Mr. Frear. But it is a very small commerce?

Col. Newcomer. It is a small commerce. Of course, they can not carry a big commerce until we get a better channel, but they have begun this business on the promise that if they did put their money in it, Congress would go ahead and do the work.

Mr. Frear. Has the channel been completed above Kansas City or

Col. Newcomer. There has been practically no work above, except isolated bits of revetment that were put in.

Mr. Frear. Was it once cleared up according to the original project? Has it ever been completed according to the original project?

Col. Newcomer. There has never been any project there, except for snagging. We have never had any definite project depth adopted there.

The CHAIRMAN. The next item is:

San Diego, Los Angeles, and San Luis Obispo Harbors, California: For maintenance, \$45,000; completing improvement of San Diego Harbor by dreding area "A" in accordance with the project submitted on page fourteen of House Document Numbered Six hundred and forty-eight, Sixty-fourth Congress, first session, as modified in the report printed in Rivers and Harbors Committee Document Numbered Eight, Sixty-fourth Congress, second session, \$85,000; for improvement of Los Angeles Harbor in accordance with the report submitted in House Document Numbered Eight hundred and ninety-six, Sixty-third Congress, second session, and subject to the conditions set forth in said document, \$50,000: Provided, That no expense shall be incurred by the United States for acquiring any lands required for the purpose of this improvement; in all, \$180,000. Such modifications as may be recommended by the Chief of Engineers and approved by the Secretary of War for the plan of silt diversion works adopted by the river and harbor act approved July twenty-seventh, nineteen hundred and sixteen, for the protection of Los Angeles and Long Beach Harbors, in accordance with the report printed in House Document Numbered Four hundred and sixty-two, Sixty-fourth Congress, first session, is hereby authorized, subject to the conditions set forth in said document: Provided, That such modification shall not increase the total cost of the work.

Mr. Kettner. Mr. Chairman, I would like to ask the Colonel the amount of money estimated for each harbor for maintenance mentioned in this item; that is for Los Angeles, San Diego, and San Luis Obispo Harbors?

Col. Newcomer. San Diego Harbor had an item of \$20,000 for maintenance, and Los Angele Harbor, \$25,000, so that the \$45,000 here proposed is made up of those two items. San Luis Obispo had

no item for maintenance required.

Mr. Kettner. I might say, gentlemen, that there is a special recommendation sent in by the Secretary of War regarding the middle ground, but I do not wish to take that up now with the colonel. Of course, if that should go in, I ask the privelege of bringing it up

later on. This is a very serious proposition, as we see it.

Col. Newcomer. I can state that in his report to Congress, made in accordance with its directions, to determine what works of improvement are needed for the fleet of defense, an item was included for San Diego Harbor and consists of widening out the channel on the middle ground, at a cost, I think, of something like \$69,000. We did not include that item, or the one, for instance, for Norfolk Harbor, because we considered the improvement in each case to be required merely for naval purposes, and it was doubtful whether it should be provided in such cases in the river and harbor bill. Mr. Kittner has brought it to my attention that it may also affect the commercial use of that channel, on account of the way this shoal makes out immediately opposite the coaling pier, and that interferes with the naval vessels when coaling there. I have made a note on that, to look it up, to see what the present situation is with reference to our project, and so I have nothing further to say at this time. Of course, it has been recommended to Congress that this other work should be done, but whether it should be in the river and harbor bill is a different proposition.

Mr. Kettner. Mr. Chairman, I would like to ask the same privilege that was accorded Mr. Booher and Mr. Gray, regarding this recommendation that was made by the local engineer opposite the coaling wharf at San Diego Harbor.

The CHAIRMAN. I suppose Mr. Kettner has explained what he has in mind. Without objection Col. Newcomer will be requested to

take that up with the Chief of Engineers, with a view to ascertaining whether it constitutes any emergency, and I am sure Mr. Kettner has it in mind, that in the event it should not be decided upon as practicable, he will wish probably a new survey, the authorization for a survey there by the next session.

The next item is:

San Francisco. Oakland, Richmond, Monterey, and Humboldt Harbors, Redwood, San Rafael, and Petaluma Creeks, Napa River, San Pablo Bay, and Sulsun Channel, California: For maintenance, \$287,500; continuing improvement of Oakland Harbor, \$92,000: Provided, That if in the judgment of the Secretary of War the prices received in response to advertisement for bids for dredging are not reasonable, so much of the amount herein appropriated as shall be necessary may be expended for the purchase or construction of a suitable dredging plant; for improvement of Richmond Harbor in accordance with the report submitted in House Document Numbered Five hundred and fifteen, Sixty-third Congress, second session, and subject to the conditions set forth in said document, \$100,000; continuing improvement of Humboldt Harbor and Bay, \$190,500; in all, \$670,000.

The next item is:

Sacramento, Feather, San Joaquin, and Mokelumne Rivers, and Stockton and Mormon Channels (diverting canal), California: For maintenance, \$51,000.

The next item is:

Coquille, Coos, Siuslaw, and Yaquina Rivers, Coos, Tillamook, and Nehalem Bays, Oregon: For maintenance, \$34,000; continuing improvement of channel over the bar at Coos Bay, \$70,000; in all, \$104,000.

The next item is:

Cascades and Dalles-Celilo Canals, Oregon, Columbia River and tributaries above Celilo Falls to the mouth of Snake River, Oregon and Washington, and Snake River, Oregon, Washington, and Idaho: Continuing improvement and for maintenance, \$70,000.

The next item is:

Willamette River above Portland and at Willamette Falls, Yamhill and Clatskanie Rivers, Oregon, Cowlitz, Lewis, Lake, and Grays Rivers, and Skamokawa Creek, Washington: For maintenance, \$48.300; completing improvement of Willamette River around the Willamette Falls at Oregon City. Oregon, in accordance with the report submitted in House Document Numbered One thousand and sixty. Sixty-second Congress, third session, \$80,000; continuing improvement of Lewis River, including North and East Fork, \$13,500; in all, \$141.800.

Skamokawa Creek is to be stricken out.

The next item is:

Columbia and lower Willamette Rivers below Vancouver, Washington, and Portland, Oregon, and mouth of Columbia River, Oregon and Washington: Continuing improvement and for maintenance, \$1,285,000: Provided. That of the funds herein appropriated \$6,000, or so much thereof as may be necessary, may be expended in completing improvement at Cathlamet, Washington, in accordance with the report submitted in House Document Numbered One hundred and twenty, Sixty-third Congress, first session.

The next item is:

Willapa River and Harbor, Grays Harbor, Chehalis and Hoquiam Rivers, Washington: For maintenance. \$7,500; for improvement of Grays Harbor in accordance with the report submitted in House Document Numbered Seventeen hundred and twenty-nine, Sixty-fourth Congress, second session, \$85,000: Provided, That pending the construction of the new dredge authorized any other Government dredge that may be available may be used for the deepening and maintenance of the bar channel; in all, \$92,500.

The next item is:

Puget Sound and its tributary waters, Olympia, Tacoma, Anacortes, and Bellingham Harbors, Lake Washington Ship Canal, Snohomish and Skagit Rivers. Swinomish Slough, waterway connecting Port Townsend Bay and Oak Bay, Columbia River between Wenatchee and Kettle Falls, Washington: For maintenance, \$30,000; for improvement of Lake Washington Ship Canal in accordance with the report submitted in House Document Numbered Eight hundred, Sixtyfourth Congress, first session, \$200,000; in all, \$230,000.

The CHAIRMAN. Strike out Anacortes.

Col. Newcomer. Strike out Anacortes. That name was left in

by error.

Mr. Hulbert. Colonel, practically all of these new projects for Oregon and Washington which were included in the old bill have been included in this one, have they not?

Col. Newcomer. There have been several left out. Mr. Dupré. Skagit River is in this item, is it not?

Col. Newcomer. Yes; but there is a new project in the bill which has been left out.

The CHAIRMAN. The next item is:

Nome Harbor and Apoon mouth of Yukon River, Alaska: Completing improvement of Apoon mouth of Yukon River in accordance with the report submitted in House Document Numbered Nine hundred and ninety-one, Sixtythird Congress, first session, \$45,000; completing improvement of Nome Harbor in accordance with the report submitted in House Document Numbered Nineteen hundred and thirty-two, Sixty-fourth Congress, second session, and subject to the conditions set forth in said document, \$105,000; in all, \$150,000.

The next item is:

Honolulu, Kahului, and Hilo Harbors, Hawaii: For maintenance, \$10,000; for improvement of Honolulu Harbor in accordance with the report submitted in House Document Numbered Three hundred and ninety-two, Sixtyfourth Congress, first session, \$50,000; and the unexpended balances of appropriations heretofore made and authorized for the improvement of Honolulu Harbor, Hawaii, are hereby made available for improvement in accordance with the above-mentioned report: *Provided*, That if in the judgment of the Secretary of War the prices received in response to advertisement for bids for dredging are not reasonable, so much of the amount herein appropriated and authorized as shall be necessary may be expended for the purchase or construction of a suitable dredging plant; continuing improvement of Hilo Harbor, \$150,000; in all, \$210,000.

Mr. Hulbert. Mr. Chairman, I would like to ask Col. Newcomer

what progress they are making on Hilo Harbor.
Col. Newcomer. I do not recall in detail now. The breakwater construction is well advanced and some dredging has been done, but just the situation I could not tell, without referring to the records.

Mr. HULBERT. They finally completed the quarry, did they not,

and they are now getting rock?

Col. Newcomer. I think they are getting rock out, but, as I say, I would really have to refresh my memory on that. I have not had occasion to look it up lately.
The CHAIRMAN. The next item is:

San Juan Harbor, Porto Rico: For maintenance, \$10,000; for improvement in cooperation with the local government in accordance with the report submitted in House Document Numbered Eight hundred and sixty-five, Sixtythird Congress, second session, \$400,000; in all, \$410,000: Provided, That until \$600,000 of the amount expended on the dredging and reclamation work authorized herein is reimbursed, the Government of Porto Rico shall on the first day of July of each year after the completion of the work pay to the Government of the United States \$50,000.

Mr. BOOHER. What is the object of having Porto Rico pay this

Government \$50,000. Is that for land?

Col. Newcomer. No, sir; the project proposed here for adoption is a project for extending the inner harbor area so as to provide more adequate space for the vessels, and the production of additional dock facilities, the present harbor being very much crowded. In connection with the extension there will be a considerable amount of land reclaimed, which will have a value, and it was thought, by reason of that value, created in that way, which will go to the local government of Porto Rico, that they should contribute toward the cost of the work. The cost of the work, if I recall now, is \$850,000.

Mr. Gray. Is that \$50,000 to be continued? Mr. Kettner. Until the \$600.000 is paid.

Col. Newcomer. The first proposition was that the Secretary of War should reserve control over the disposition of that land that is so reclaimed, and provided that the rentals on account of leases that are paid and received by the Porto Rican government should be deposited to the credit of the United States as part reimbursement; but Gen. McIntyre, who has charge of the Insular Bureau, said he thought it would be a very much better proposition than that to have these regular payments made—a stipulated payment each year after the work is completed, extending over a considerable period of years—and, as we saw no objection to that, it was modified in this bill.

Mr. Gray. Colonel, was the government of Porto Rico consulted at

all about their willingness to do this?

Col. Newcomer. The officer in charge of the Insular Bureau—Gen. McIntyre—of course, has general control of it.

Mr. Gray. Are the people down there willing to do that?

Col. Newcomer. Of course, when that proposition was taken up in the first place, the reimbursement question was taken up. This last phase of the matter—of putting it in the form of a stipulated sum each year rather than depositing the receipts from rentals—I do not think has been submitted to them, except through their representative here.

(Whereupon, at 5 o'clock p. m., the committee adjourned until to-

morrow, Thursday, May 3, 1917, at 2 o'clock p. m.)

House of Representatives, Committee on Rivers and Harbors, Thursday, May 3, 1917.

The committee met at 2 o'clock p. m., Hon. John H. Small (chairman) presiding.

STATEMENT OF COL. HENRY C. NEWCOMER-Resumed.

The CHARMAN. Gentlemen, at the conclusion of the meeting on yesterday the committee had completed down to the bottom of page 26 and the top of page 27, the last item of recommendations for appropriations; and during the consideration of the recommendations contained in this tentative bill certain items were referred back to Col. Newcomer for further consideration, with a view to determining and

reporting whether the War Department desired to make any modification of their original recommendations; and if Col. Newcomer is now ready the committee would be glad to hear from him in such order as

he may think proper to present the matter.

Col. Newcomer. I may state that in addition to certain particular items that were brought to my attention vesterday with a view to further investigation, another very important fact developed yesterday which would affect some of the items as recommended by the Chief of Engineers. In discussing one of the items that came up yesterday, San Diego Harbor, it developed that the Chief of Engineers had thought that the bill as submitted to the Secretary of War and by him to Mr. Small made provision for the additional improvements required for the operations of the fleet of defense, to which we have referred several times before. That is the report contained in Senate Document No. 3, Sixty-fifth Congress, first session. When he learned that only the East River had been included, because it was in before, he said we ought to, by all means, put all of them in the recommendation of the department, and I have, in the brief time which I have had, prepared certain changes in the phraseology of the bill to provide for those additional items, and I think possibly it would be just as well to begin with the first change, which would be on page 8, and take them up in order throughout the bill.

This is for Norfolk Harbor. The bill as printed provides for additional improvement at Norfolk Harbor, and it was that fact, to a certain extent, which gave the Chief of Engineers the impression which he had that you were providing for all the work that was proposed there. The work which is included in the bill is simply an item that was in the bill before, and an item which has been recommended for several years as a commercial need. In Senate Document No. 3 the further work required for the needs of the Navy is set forth very briefly. The existing project for Norfolk Harbor is a 35-foot project with 400-foot channels. The additional improvement proposed in the bill as printed was to widen those channels to 600 feet and provide certain anchorage areas. Now, the Navy wants 40 feet to the navy yard and a minimum width of 750 feet in the approach. As a matter of fact, we can get 750 feet over a portion of the approach only. The part near the navy yard is limited by the physical situation to 450 feet; but with the greater width outside, we think they

can probably get along with that.

On page 5 of the Senate document, about the middle of the page, you will find the situation at Norfolk set forth briefly. Three estimates were prepared. The district officer first thought that a width of 500 feet in the approach channel would probably be sufficient, and an estimate on that basis was prepared amounting to \$2,937,000. His attention was drawn to the fact that the Navy wished, at least ultimately, provision, in connection with this improvement, for 750 feet, and therefore Item B was prepared, which provides for that at a cost of \$4,039,000. Then another estimate was made giving a still wider channel in the outer bay, 1,000 feet, amounting to \$5,980,000. Item B, as I understand it, is the one the Navy wishes adopted, and in order to start that improvement and provide as much as we could well use for the next year, until another bill, I suggest

this modification in the item for Norfolk Harbor and Channels. Va.. page 8, line 21, strike out "\$360,000" and insert:

And in accordance with the report submitted in Senate document Numbered 3, Sixty-fifth Congress, first session, item B, page 5, \$900,000.

Changing \$360,000 to \$900,000; in other words, adding \$540,000.

I might interject a remark at this point which will possibly ease the minds of the members of the committee to some extent by stating that the additional items which will be recommended amount to \$971,000; but, by good fortune, I can recommend a reduction of \$975,000 in another item, which has just come to my knowledge, the improvement at the mouth of the Columbia River, which involves the jetty work, and for which there was an estimate here of \$975,000 for bringing it to completion. I have just had a report from the district officer showing that that work should be suspended, apparently, at this time, on account of the great cost involved and the fact that the jetty has now been brought up to what they consider a fair grade for several years, so that the estimate that has been proposed for that item can be reduced by that amount, and the changes that will be recommended will leave the total in the bill substantially as it was before.

Mr. Gallagher. Did the last bill which we reported to Congress

contain that item of \$975,000?

Col. Newcomer. It did; yes, sir. The next item is on page 14.

Mr. Costello. How much are you going to reduce that item? Where is the Columbia River proposition in the bill?

Col. Newcomer. You will find that on page 24.

Mr. Kettner. Suppose we take up next the item on page 14, because we will come to the other item in regular order.

Mr. Costello. Yes.

Col. Newcomer. I will come to that item later.

On page 14 we have the item for Mobile Harbor and bar. That matter was discussed this morning with the Chief of Engineers and Mr. Gray; and the Chief of Engineers desires me to make this recommendation to the committee: He says that he does not see his way clear to increase the amount in the bill by providing a greater sum than that proposed here for the new project, but he does think it would be advisable to include an authorization for a new project. In other words, make the sum that is here appropriated available for improvement and maintenance in accordance with that new project, so that hereafter the department can submit its estimates to Congress for work in accordance with the project; and, moreover, the operations of the dredges used there for maintenance can be applied, in so far as the funds will permit, toward providing the greater depth, looking toward a 30-foot project as compared with a 27-foot project, so that the change of wording recommended there is this:

After line 4 add:
"For maintenance of channel connecting Mobile Bay and Mississippi Sound, \$5,000; for improvement and maintenance of Mobile Harbor and bar, in act cordance with the report submitted in House Document Numbered Seventeen hundred and sixty-three, Sixty-fourth Congress, second session, and subject to the conditions set forth in said document, \$110,000; in all, \$115,000."

That statement, if approved by the committee and adopted by Congress, would adopt the new 30-foot project. That, of course, does not involve a change in the appropriation.

The CHAIRMAN. That adopts the new project.

Mr. Scully. It commits the Government to the project?

Col. Newcomer. Yes.

Mr. Costello. And allows the expenditure of \$110,000 on it at this time?

Col. Newcomer. Yes, sir; including maintenance.

Mr. Gallagher. What will the total improvement cost?

Col. Newcomer. My impression is it is a little over \$1,000,000; between ten and eleven hundred thousand dollars, If I recall correctly.

The next item is on page 15, and it is the Lake Pontchartrain item. We wired the district officer concerning the limitations under which we were framing this bill with reference to the adoption of new projects—those required for military necessities—and he wired his opinion that the improvement of Lake Pontchartrain in accordance with the project which was in the bill as passed before but stricken out by us is considered a military necessity. It appears that there are shipyards on Lake Pontchartrain which are building boats, and it is undoubtedly the prime necessity of the Government now to furnish boats as rapidly as possible for the seagoing trade. These are boats that carry from 1,500 to 2,500 tons, and we think the small amount involved in that project, \$32,000, is undoubtedly a desirable thing. We did not know that situation when we acted upon this bill. We simply assumed it was the old situation, and it was then a question of getting out the lumber barges for the carrying of lumber from Lake Pontchartrain to the Mississippi Sound and to the different lumber ports; but with this additional urgency for getting out new seagoing boats we think it ought to be included.

Mr. Gallagher. You are referring to the \$4,000 item? Col. Newcomer. No, sir; \$32,000. We propose adding, on page 15, line 19, after \$4,000, and after putting a semicolon instead of a period, the words-

For completing improvement of Lake Pontchartrain, in accordance with the report submitted in House Document Numbered One hundred and seventy-six, Sixty-third Congress, first session, \$32,000; in all, \$36,000.

The CHAIRMAN. The representation has been made regarding the Lake Pontchartrain improvement and the existence of the shipbuilding plants there; that their value is enhanced by reason of their nearness to the necessary supply of lumber.

Col. Newcomer. That is very true. Lake Pontchartrain is a favorable locality for building and launching these boats and for getting the material, etc. Of course it is very convenient to New Orleans as a labor center, and we now consider that this is really a very essential

On page 22 is the next item, which is the San Diego item. This is another of the items in Senate Document No. 3, and is the one given on page 5, near the bottom of the page. The proposition, as we understand it, is that the Navy wants the channel across the middle ground inside the bay deepened from 32 to 35 feet. The estimated cost of that is \$69,000, and in order to provide for it the Chief of Engineers recommends that there be inserted, in line 5, after "San Diego Harbor":

In accordance with the report submitted in Senate Document Numbered Three, Sixty-fifth Congress, first session, and—

Then it would proceed with the text, "by dredging area A," and so on. In other words, it puts in both of these documents and changes the amount in the tenth line from \$85,000 to \$154,000.

The CHAIRMAN. That is \$85,000 plus \$69,000?

Col. Newcomer. Yes; and, of course, the amount in line 17 is in-

creased \$69,000, from \$180,000 to \$249,000.

The next item is on page 23, with reference to San Pablo Bay and Mare Island Strait. In this case the Navy states that they want a channel of 35 feet to the Mare Island Navy Yard if the navy yard is not relocated in San Francisco Bay. I understand that that proposition has not been decided. The inquiry I made to-day brought forth the fact that the commission which was sent out to investigate this matter has recommended that the navy yard be retained where it is on its present status, and that a yard with deeper facilities be located on the bay, possibly at Hunters Point or elsewhere. Therefore if that recommendation were to be adopted no further improvement would be needed. We have now 30 feet; but if they retain the navy yard there and want to get deeper water, in order to get them 35 feet, the estimated cost is \$661,000. Now, in order to provide for the contingency of their requiring 35 feet at Mare Island, this change is recommended:

Line 5, page 23, after "San Pablo Bay," insert: "Mare Island Strait"—

So as to get the locality in the title.

Mr. Costello. Are they going to abandon Mare Island?

Col. Newcomer. As I say, that proposition has not been settled yet. They do not propose to abandon it entirely, but they may, or may not, want additional depth. They propose to maintain the Mare Island Navy Yard with its present depth if they get another station down in the bay. If they do not get that station, it will be necessary to deepen it to 35 feet.

Mr. Costello. Will this expenditure be subject to a decision of

that question?

Col. Newcomer. That is the way I propose to introduce the phrase-

ology.

In lines 17 and 18 strike out "in all, \$670,000" and substitute the following:

For improvement of San Pablo Bay and Mare Island Strait, in accordance with the report submitted in Senate Document Numbered Three, Sixty-fifth Congress, first session, if required for naval needs, \$330,000—

That is about one-half the total amount, and probably all they could expend in one year—in all, \$1,000,000.

In other words, the new total for that item would be \$1,000,000. Mr. Frear. Have you discussed this San Francisco paragraph? Col. Newcomer. Yes; we discussed that vesterday.

Mr. Frear. Have you discussed the Richmond Harbor project?

The CHAIRMAN. Yes; we went over that yesterday.

Mr. Frear. May I ask some questions in regard to those items? I did not know that you had passed them.

The Chairman. Yes; we will come back to that after a while. Suppose we let Col. Newcomer finish the statement he is now making.

Mr. Frear. That makes a total of \$1,000,000.

Col. Newcomer. That makes a total of \$1,000,000 for this item with

the change indicated.

On page 24 is the item where we get the reduction. In line 19 the amount there stated, \$1,285,000, should be changed to \$310,000, omitting \$975,000 from the mouth of the Columbia River on account of the conditions there.

Mr. Dupré. Colonel, it might be well for you to restate just at this

juncture the reasons that justify that conclusion.

Col. Newcomer. A report has just been received from the district officer stating that he does not consider it advisable under existing conditions to continue the work on the jetties on account of the increased cost and the difficulty of getting labor. He thinks the work should be discontinued for several years. The work so far done has brought the jetty throughout practically its entire length well above high tide. There is a portion at the end that the storms of last winter reduced somewhat, and there is a very deep hole washed around the end of the jetty, as usually occur in these cases, so that any extension would be very expensive at this time, and he suggests, therefore, a discontinuance of any work on the north jetty for at least one year, and he says if that is done the amount estimated to carry that forward for the year can be omitted. He has a balance of funds on hand sufficient to keep the dredge at work which has to be operated on the bar.

The CHAIRMAN. Resulting in a reduction of \$975,000, and leaving

the amount to be appropriated \$310,000?

Col. Newcomer. Yes, sir. These changes, if made as suggested, would give a net reduction of \$4,000 in the total carried by the bill.

Mr. Dupré. Which was what, originally?

Col. Newcomer. \$26,897,000. That, I believe explains all the odifications except Lake Contrary. That I did not mention bemodifications except Lake Contrary. cause I did not have any change to present. I presented to the Chief of Engineers the matter of the additional work desired at Lake Contrary, just below St. Joseph on the Missouri River, which involves an appropriation of \$25,000 mainly to close the gap between the revetment that has recently been put in and the revetment above so as to make secure the work just done at Government and local expense at a cost of \$125,000, and the Chief of Engineers stated that in his opinion he did not feel justified in recommending that appropriation at this time for several reasons. The first reason was the one stated yesterday, that it was not considered of great urgency as a commercial matter or as a military need of any kind, and he thought it could be taken care of as a question of saving Government property in this way: We have on hand a balance of about \$1,000,000 from the lump-sum appropriations which were made subject to allotment by the Secretary of War. We have been holding and guarding it very carefully recently for fear there would not be any river or harbor bill, in which case, of course, it would be necessary to devote that largely to taking care of Government plan and necessary expenses of supervision where the works would have no fund provided by Congress. But if this river and harbor bill passes, then there will be a fund available from which any necessary amount could be allotted in order to protect the Government work. I may state also that we wired the district officer in December as to the necessity for closing this gap, and we got the response that it was not needed unless the head of the revetment should be damaged by this spring's flood. I have not any later information.

Mr. Booher. That is what I told you yesterday. The danger is

from cutting in behind.

Col. Newcomer. As a rule on these revetments, while the process of destruction varies in rapidity in different cases, as a rule it is a gradual process, and if the head of the revetment is attacked by caving there, in the first place, we have the general emergency appropriation from which an allotment of not exceeding \$10,000 could be made, and then, as I say, we have also this other balance of \$1,000,000, subject to allotment.

Mr. Booher. What language do you propose to insert in the bill that would authorize the use of that money? The present language

would hardly be sufficient.

Col. Newcomer. I do not think we need any language at all in the bill. The work has been approved and the allotment could be made by the Secretary of War without any further authorization of Congress.

Mr. Booher. But if you want to begin that work and go to the department to get the money, will there not be the objection raised that there is no law authorizing the appropriation from the lump sum for

C i N

Col. Newcomer. The lump-sum appropriation was made available for such river and harbor projects as had been authorized and started.

Mr. Booher. But this work was not started when that was done, and they did not have this work in mind.

Col. Newcomer. When was this work started?

Mr. Booher. They are still working at it, the lower end of it; that is, they have gotten the most of it completed but there is some finishing work to be done.

Mr. Switzer. Could the Secretary of War reallot it?

Col. Newcomer. He has the authority, as I understand it, to allot that money to approved projects as the status of the work may require anywhere in the country.

Mr. Dupré. The point Mr. Booher is making is that the project

was authorized in a bill subsequently—

Mr. Booher (interposing). The money was appropriated; \$75,000 has been appropriated for years, but the people have never been able to raise their part of the money. The project itself was adopted in 1908.

Col. Newcomer. I do not think there is any question about that at all.

Mr. Booher. As I say, it was authorized back in 1908, and we have each year appropriated \$75,000 for it since I have been here, in accordance with document so and so. Now, if that is the case, and the money in this lump sum could be allotted by the Secretary of War to any other fund or work, I do not care about having anything in the bill, except that I would like to be in a position to explain the matter to the people who are interested in it. If there could be some

language put in the bill that would in a way protect me from having to explain the matter to a thousand people, I would like to have it done.

Mr. Frear. May I make an inquiry at this point?

Mr. Booher. Please wait until we get through with this one.

The CHAIRMAN. Judge Booher is discussing with Col. Newcomer the matter of an item which was contained in the last bill for the Missouri River near St. Joseph.

Col. Newcomer. As a matter of fact, was that item in the last bill?

Mr. Brooker could tell.

Mr. Kettner. Yes; it was in the last bill that was reported.

Mr. Booher. It was carried in the bill before. There was \$75,000 carried for it in the 1916 bill. I know that it was in the bill that did

not pass.

Col. Newcomer. If the 1916 act did not modify the status of the project any, but simply provided for the completion of the project. then I do not think there is any question whatever but that the lumpsum appropriation would be available for it.

Mr. Booher. Could you not recommend some language to be put in there showing that the appropriation may be taken from this

lump sum?

Col. Newcomer. It would be unusual to put something of that kind in the bill simply as a matter of information to the persons

Mr. Booher. Of course every one of them will want to know what

Col. Newcomer. I think that could be done by a letter from the department. Of course I have not thought of any language to insert in the bill.

Mr. Booher. Your opinion is that if the river begins damaging the upper end of the new work the money could be taken from the lump sum carried in the bill of 1915 without making a specific appropriation?

Col. Newcomer. Exactly.

Mr. Booher. And enough of it could be taken to protect it?

Col. Newcomer. Yes, sir; we will have that in the record. The Chairman. Colonel, have you completed your statement on the matters that have been referred to as comprising the modifications of your original recommendations?

Col. Newcomer. Yes, sir; I believe that all of them have been

mentioned.

Mr. Frear. I understood that you had reduced the appropriation for the Columbia River, on page 24, from \$1,285,000 down to \$310,000?

Col. Newcomer. Yes, sir.

Mr. Frear. How did you happen to make that estimate of \$1,285,-

000 that appears in the bill?

Col. Newcomer. That was made to provide for additional jetty work on the north jetty at the mouth of the Columbia River. It was estimated that \$975,000 would be required to complete that work and to do certain work of maintenance during this year.

Mr. Frear. You believed that that was an emergency matter and

that it was a necessary expenditure at this time, did you not?

Col. Newcomer. From the information we had from the district officer we considered that it was desirable.

Mr. Frear. And you arbitrarily reduced that estimate by \$975,000

just on his statement?

Col. Newcomer. Yes, sir; on his statement, not arbitrarily.

Mr. Frear. That is the only information you had?

Col. Newcomer. Yes, sir.

Mr. Frear. I wanted to inquire what method was followed in making changes in the estimates.

Col. Newcomer. It was done on information furnished by the

district officer.

Mr. Frear. You did this from information from the district officer, and you have not consulted with any one else as to its necessity?

Col. Newcomer. No, sir. The district officer is the one who is

most familiar with the work.

Mr. Frear. Referring to the item for Richmond Harbor, on page 23, what is the total amount to be expended there?

Col. Newcomer. It is my impression that it is about \$428,000.

Mr. FREAR. What is that included for? Is that a matter of pre-

paredness or of commercial necessity?

Col. Newcomer. That is a part of the commercial necessity. That is the terminus for one of the transcontinental lines, the Santa Fe, and there is a very extensive commerce seeking outlet there.

Mr. Frear. Right at that point. You said it was seeking an out-

let-what is your reason for making that statement?

Col. Newcomer. The information, all of which has been embodied in this document—

Mr. Frear (interposing). You have examined that project per-

sonally?

Col. Newcomer. Yes, sir. The locality there has already spent large sums in preparation for this harbor improvement, in building terminals, wharves, etc. The locality is to pay one-half of the cost of this item of improvement.

Mr. FREAR. But they get a great deal of land by that proposition, do they not? They get a good deal of land on a real estate project,

do they not?

Col. Newcomer. I think there is some, but it is not a great deal.

Mr. Frear. I have examined that project myself, and so I have some information about it. They have a wharf there at present, where there is no traffic whatsoever. There is a wharf there at present, and this traffic of which you speak is carried on trains to-day, is it not, over to San Francisco by ferries? Is there any traffic whatsoever from Richmond Harbor by means of any wharf at that point?

Col. Newcomer. Yes, sir; there is a very considerable traffic now, running over 500,000 tons, which, however, does not come from this particular part of the Richmond front. They have some wharves there farther up the bay, where they now have sufficient water, from

which they carry a considerable commerce.

Mr. Frear. You said 500,000 tons?

Col. Newcomer. I think fully that much; yes, sir. They have not only the Santa Fe Wharf there, but the principal one, the Standard Oil Co.—

Mr. Frear (interposing). Does the Standard Oil Co. ship any of its products over the water now?

Col. Newcomer. Yes, sir.

Mr. FREAR. Are you sure of that?

Col. Newcomer. Yes, sir. Now, there has been a wharf built there by the locality. I am talking about the wharf that the city built below, which forms a part of this project. They built that on the supposition that the Government would carry out this project.

Mr. Frear. That is a very shallow place, is it not, for a harbor?

Col. Newcomer. It is comparatively shallow.

Mr. Frear. What is the depth of the water near there?

Col. Newcomer. I think it is possibly not more than 8 or 10 feet. You know the eastern side of San Francisco Bay slopes out very gradually from the shore. In some places, as here, it is not so gradual, but down farther, on the Berkeley front and the Oakland front, we have to go out a couple of miles before we get to a depth of, say, 15 or 16 feet. The deep water is closer to the shore here, but it is necessary to excavate a channel and basin.

Mr. Frear. And that is the reason why the engineers have placed that in this bill, because it is a new project. It is simply a commercial project and not in any sense urged on account of preparedness.

Col. Newcomer. It is a commercial project in the sense that it affords a good outlet for that interior territory in the San Joaquin and Sacramento Valleys, which are great food-producing areas, and this, of course, would make an available point of shipment for the products of those valleys.

Mr. Frear. I will now ask you about Mobile Harbor. I was not

here when that was taken up.

Mr. Gallagher. Where they propose to build this new wharf is on shallow water, is it not?

Col. Newcomer. I think so.

Mr. Frear. Let me say in connection with that matter that the gentlemen who took me all over that project stated that it was a real estate project, pure and simple. He was one of the leading men of the place. So there is some doubt expressed about it even there in Richmond.

Mr. Kettner. In answer to what Mr. Frear has said, I will try and call his attention to some facts. Mr. Frear, I think you were with us at the time we had lunch—

Mr. Frear. No: I was not there.

Mr. Kettner. Now, that is where the pier from which the Standard Oil would make shipments is located. As Col. Newcomer stated they will make large shipments. Now, in regard to the statement that some of the people there did not believe in the project, I would say that they voted \$400,000 in bonds and they will make this improvement. The bonds carried by a vote, I think, of about 4½ to 1. Therefore, the people there must be in favor of the improvement, and it is a "fifty-fifty" proposition.

Mr. Frear. Let me say, in response to that, that so far as the Standard Oil Co. is concerned, I am quite well satisfied from the investigations I made there that they are not favoring this project, and I will say that one of the leading members of that concern was one of the gentlemen who showed me around. I was not acquainted with him before I went there. There were some other leading men of California who took me over that project at the time, and they had no object in it except to acquaint me with the facts. Now,

if this is for the accommodation of the Standard Oil Co., I would like to see testimony in the record to show that the Standard Oil Co.

has ever asked for it or indorsed it.

Col. Newcomer. In response to that statement, I will say that the Standard Oil Co. is not affected by this project except in the matter of the taxes that they will have to pay on account of the bonds that have been issued. I might state this, also, that I was just informed by Mr. Curry, the other day, that the Standard Oil people were in favor of this proposition, although they have a wharf that will serve their needs, and that they are willing to bear their proportionate part of the burden of taxation. I might state, further, that this proposition really involves two parts. There is an outer harbor and an inner harbor. The outer harbor is what I had in mind at first, because it is the most important-

Mr. Frear (interposing). Does this include both the outer and

inner harbors?

Col. Newcomer. I will see. I am not quite certain.

Mr. Frear. This is for the improvement of Richmond Harbor.

Col. Newcomer. The project document referred to in the bill does include the outer channel and then the channel to the slough. Now, the outer harbor project involves a slight reclamation of land because of the fact that in order to straighten the harbor line a bulkhead has to be built, but that reclaimed land will be largely used for wharf purposes, that is, municipal wharf purposes. There is no other land reclamation there that I can see. This is right opposite the bluff, and the coast line there is very abrupt. Now, in connection with the inner harbor development, leading up to the slough, as I understand it, that will probably involve the reclamation of quite a large area of land. That, of course, has a considerable value from the real estate aspect, but I do not think that the other part has.

Mr. Frear. It would apply more particularly to the inner harbor?

Col. Newcomer. Yes, sir.

Mr. KETTNER. Is it not a fact that those lands go to the city and not to individuals?

Mr. Frear. Those reclaimed in the outer harbor do, and that was one of the reasons why they voted so largely for the bond issue, because they thought that that would give them something back.

Mr. Osborne. I would like to ask Col. Newcomer a question or two. The point to which you referred is the San Francisco termi-

nus of the Santa Fe Railroad system, is it not?

Col. Newcomer. Yes, sir.

Mr. Osborne. And it is also the terminus of a pipe line for oil reaching down to the oil regions, 250 miles south?

Col. Newcomer. Yes, sir.

Mr. Osborne. Is the oil supply situation one of great importance?

Col. Newcomer. Yes, sir.

Mr. OSBORNE. Is it not a fact that that fuel oil is used largely by the United States Navy?

Col. Newcomer. That is true; yes, sir.

Mr. Osborne. And that, of course, has a national importance?

Col. Newcomer. Yes, sir. Mr. Osborne. I would like, Mr. Chairman, after we leave this discussion, to say something about one or two other items.

Mr. Frear. I want to ask you some questions in regard to the Mobile Harbor. As I understand it, you have adopted a project

there requiring the expenditure of \$1,000,000. Is that right?

Col. Newcomer. A change in the wording has been suggested which, if approved, would mean the adoption of a new project which involves ultimately the expenditure of something like \$1,-000,000.

Mr. Frear. Have you reported on that? Col. Newcomer. Yes, sir.

Mr. Frear. But it is not included in this bill?

Col. Newcomer. No, sir.

Mr. Frear. Where is the report on that?

Col. Newcomer. It is in House Document 1763, Sixty-fourth Congress, second session.

Mr. Frear. What is the purpose of that?

Col. Newcomer. It increases the project depth.

Mr. Frear. What is the depth now?

Col. Newcomer. The present project depth is 27 feet, and we propose to increase it to 30 feet.

Mr. Frear. That was the project that was discussed yesterday when a comparison was made with the project at Tampa?

Col. Newcomer. Yes, sir.

Mr. Frear. What is the increase provided?

Col. Newcomer. Three feet.

Mr. Frear. Is that considered as a commercial or preparedness proposition?

Col. Newcomer. No money is appropriated for it. No additional

money is appropriated for it at this time.

Mr. HULBERT. That would make a depth of 30 feet in that harbor?

Col. Newcomer. On the facts as reported—

Mr. Hulbert (interposing). That is the object of it?

Col. Newcomer. Yes, sir.

Mr. Frear. That is to cost \$1,000,000?

Col. Newcomer. Yes, sir.

Mr. Frear. Is that a preparedness or commercial proposition?

Col. Newcomer. As I explained before, the Chief of Engineers was not willing to recommend any increase in the appropriation for Mobile at this time. He thought that the facts did not justify such increase as a matter of urgency, either in a military or commercial sense, but he was willing to recommend the adoption of the project so that in the future the annual estimates can be based upon that project.

Mr. Frear. He recommends the new project on the ground of com-

mercial necessity?

Col. Newcomer. Yes, sir; I suppose you might say that.

Mr. Dupré. Colonel, did I also understand you to say that it would be possible for you to utilize some of this \$110,000 on that new project if the conditions permitted? You segregated the two propositions, and you had \$5,000 for maintenance and \$110,000-

Col. Newcomer (interposing). \$5,000 was for the maintenance of one of the other items in the group; \$110,000 was estimated for the

maintenance of Mobile Harbor.

Mr. Dupré. Was that made applicable to the new project, if conditions permitted?

Col. Newcomer. Yes, sir. The work is being done by Government

dredges.

Mr. OSBORNE. I was not here yesterday when those items relating to Los Angeles Harbor were reached on page 22, and I do not know whether there were any questions asked in regard to them or not. I call attention to this item in the bill:

Such modifications as may be recommended by the Chief of Engineers and approved by the Secretary of War for the plan of silt diversion works adopted by the river and harbor act approved July twenty-seventh, nineteen hundred and sixteen, for the protection of Los Angeles and Long Beach Harbors, in accordance with the report printed in House Document Numbered Four hundred and sixty-two, Sixty-fourth Congress, first session, is hereby authorized—

And so forth.

I want to say that recently, within the last month, Los Angeles County voted \$4,500,000 for flood control, and \$1,085,000 of that was for the purpose of taking care of this silt diversion. This item there is simply to permit a new place of exit into the ocean. Now, I notice that there have been a good many cuts made as between the old bill and this bill on the Pacific coast. It did not strike you that we were getting more than our share on the Pacific coast, did it?

Col. Newcomer. We did not—

Mr. Osborne (interposing). And I see now you have chopped out the Columbia River—

Col. Newcomer (interposing). It just happened——

Mr. Osborne (interposing). Of course, that is very pleasant to

everybody except to the people in that part of the country.

Col. Newcomer. It just happened that way. Of course, the Chief of Engineers was going to recommend the insertion of this other item when he found out the situation, and we will recommend that, undoubtedly, irrespective of the effect on the bill. It just so happened that at that time we got a report recommending the suspension for next year of this work, which we had estimated would cost that sum. I do not think that there has been any special discrimination against the Pacific coast.

Mr. OSBORNE. We are a long way off, and are modest, anyway, and I fear that our modesty is expensive to our constituents out there.

Col. Newcomer. I think you will find by comparing the items that as many items, in proportion, have been retained on the Pacific coast as anywhere else. For instance, you have two new projects at San Diego, one new project at Los Angeles, a new project at Richmond, another one at San Pablo Bay and Mare Island Strait. Then, there is another one at the Lake Washington Ship Canal. Of course, we had no idea of making any geographical distribution of them.

Mr. Osborne. Is that estimate of \$371,000 for Humboldt Harbor

and Bay retained?

Col. Newcomer. Yes, sir; separated for maintenance and for improvement or new work.

Mr. Osborne. And the item for \$200,000 for Crescent City Harbor is cut out?

Col. Newcomer. Yes, sir.

Mr. Frear. In response to that inquiry, would you say that the

Pacific coast has had its share?

Col. Newcomer. I have not gone over it in that way, but my impression is that they have not been treated any worse than other sections.

Mr. Dupré. Did you not disclaim any purpose of making a geographical distribution of the projects?

Col. Newcomer. Yes, sir.

Mr. Osborne. I want to ask whether the item for Petaluma Creek

and Napa River is retained?

Col. Newcomer. No, sir; that is cut out. For Petaluma Creek and Napa River something is retained for maintenance, but the new projects proposed for Petaluma Creek and Napa River, and also San Rafael Creek, were cut out.

Mr. Switzer. There are immense timber resources around Crescent

City, are there not?

Col. Newcomer. Yes, sir; that is very true, but we have felt all along that that project was only justified in connection with a railroad, and the railroad is not there yet.

Mr. Gallagher. Has not the railroad built piers there?

Col. Newcomer. No, sir. There has been some local lumber traffic. Mr. Switzer. There is no railroad at Crescent City. It is 100 miles

from the railroad.

Mr. Osborne. You say that there is no railroad there and that it is the center of a great lumber region. Lumber will be required to meet the defense needs, and if you are considering the matter from the defensive standpoint you have a case there at Crescent City deserving of consideration by the committee and Congress.

Col. Newcomer. I might state that the Chief of Engineers in taking up these matters this morning mentioned the regret with which he cut out Cresent City Harbor. He is very much in favor of the project, but he did not feel that it was one that should be included at

this time.

Mr. TREADWAY. I should like to ask the Colonel if any further con-

sideration has been given to Boston?

Col. Newcomer. That has not been discussed with the Chief of Engineers any further. I did not understand that anybody requested

that that be done.

Mr. Treadway. I brought it up the other day and asked for some explanation as to why it was taken out and it did not strike me that there was very much explanation offered on that item being removed from the present bill. It is a very important project and one that has been favorably considered. This bill is based on the Senate bill of last year, and I understand that the Chief of Engineers is very favorable to the project. I do not need to go over the various features of the reason why it seems to me that Boston is one of the important places that should be included in the bill. If it has not been given any further consideration, in view of the fact that other items have been presented here not incorporated in the printed form before us, I should strongly urge that Boston be given consideration here by the committee or by the Chief of Engineers or by both to bring about results.

The Chairman. In view of the suggestion made by Mr. Treadway without objection, Colonel, will you kindly give that reconsideration

with the Chief of Engineers?

Col. Newcomer. I certainly will take it up. I did not understand that it was proposed to have the department reconsider its attitude in the matter. You simply asked the explanation, and I gave the

explanation of our attitude. Of course, if you wish to have it done,

I will do it at the first opportunity.

Mr. Treadway. I did not ask for it at that time and you covered all I asked for, but I fully intended when the time came to take it up again. I realized that the attitude of the committee would be very largely influenced by the advice that the Chief of Engineers would give. There is no occasion for me to rehearse the situation. It has been debated in committee and on the floor of the last three or four Congresses and had everyone's approval last year. I am free to say that I was very much surprised the first time I glanced at the bill to find that it was not included as the other items were.

Mr. Switzer. Permit me to say that as I understood it the request made of Col. Newcomer to look into all these items was made yester-

day in your absence, Mr. Treadway.

Col. Newcomer. The suggestion was made that I should give them

full consideration with the Chief of Engineers.

Mr. KETTNER. That is, the items included in Senate Document No. 3.

Mr. Hulbert. Not all of the items.

The CHAIRMAN. The colonel has noted the request, which will be

taken as the request of the committee.

Mr. HULBERT. I want to inquire if the language on page 4, folios 6 to 9, was intended to adopt the \$13,000,000 project for the improvement of the East River?

Col. Newcomer. Yes, sir.

Mr. Hulbert. With this modification, of course, that across Diamond Reef the depth of 35 feet will be extended to 40 feet?

Col. Newcomer. Yes, sir.

Mr. Hulbert. In Senate Document No. 3, which is a report made upon a resolution introduced by Senator O'Gorman, of New York, in the last Congress, on page 4, I note this sentence:

North of Diamond Reef a channel of somewhat restricted width having a depth of 40 feet is now available throughout East River, except at Hell Gate.

So that this project, as modified by extending the depth at Diamond Reef to 40 feet, would give a restricted channel the entire length of the East River of 40 feet, except at Hell Gate?

Col. Newcomer. Yes, sir.

Mr. HULBERT. But the 40-foot channel would not have any better value for vessels which would require more than 35 feet than it has, if those vessels were to pass through Hell Gate, until Hell Gate has been deepened to 40 feet?

Col. NEWCOMER. That is right.

Mr. HULBERT. In this report the engineer gives the estimates for 40 and 35 foot channels, both practicable and commodious, on page 5?

Col. Newcomer. Yes, sir.

Mr. HULBERT. What is the objection to the adoption of a 40-foot project at Hell Gate, the same as you have adopted at Diamond Reef, without the appropriation of any additional sum of money, so that we will be in a position to have subsequent recommendation made to get 40-foot depth at Hell Gate, just as you have adopted the recommendation of 3 feet additional depth at Mobile, so that it will be possible in the future to recommend further appropriation to go to that depth in Mobile River.

Col. Newcomer. I do not know that there would be any objection, except this: We have not understood that the Navy was desirous at

this time to go to more than 35 feet.

Mr. HULBERT. If there is no desire to go to 40 feet, you do not have to ask for the money; but if you adopt the project now to go to 40 feet at Hell Gate, the same as at Diamond Reef, then at any time that the Navy might ask for the necessary appropriation the project would be already authorized?

Col. Newcomer. Yes, sir.

Mr. Hulbert. We would thereby avoid the delay that might occur at any time when there would not be a bill reported with the new project in it?

Col. Newcomer. Yes, sir.

Mr. Hulbert. Do you not regard the strategic value of the East River as providing the means of ingress and egress to and from the Brooklyn Navy Yard, and particularly in view of the fact that there are four bridges across the river, the demolition of any one of which might entirely block off the navy yard, as a sufficient justification for

adopting at this time 40 feet at Hell Gate?

Col. Newcomer. It seems to me that 35 feet at Hell Gate is really adequate, for this reason: The depth of 35 feet, with 5 feet of tide, gives you practically 40 feet. The draft of our heaviest battleship contemplated is about 33 feet. It seems to me that 35 feet will answer. Of course, there would be a certain advantage in having access to the navy yard for a crippled vessel; but whether you would want to go to the very large expenditure that would be involved in the 40 feet all through Hell Gate in order to provide that facility, in addition to the other across Diamond Reef, I do not know. The Navy Department has not asked for it.

Mr. Hulbert. You do not go to the expense unless you ask for the

 $\underset{\sim}{\text{money}}$.

Col. Newcomer. I thought myself that we should wait to provide

for that until they asked for it.

Mr. HULBERT. What objection can there be to making the authorized depth of the river uniform throughout its entire length, in view of the fact that when you have completed the Diamond Reef deepening you will then have 40 feet depth the entire length of the river except at Hell Gate?

Col. Newcomer. I do not see any objection.

Mr. HULBERT. But, of course, you will not get the additional 5 feet depth at Hell Gate unless the Chief of Engineers makes the recommendation?

Col. Newcomer. And Congress provides the money.

Mr. HULBERT. Is it not just as well, while you are providing 40foot depth throughout the entire length, except at that point, that it be included, so that you will have the same depth throughout the

entire length?

Col. Newcomer. The only objection I can see is the policy that has generally been observed by Congress and by the department in handling these improvements. The law prescribes that in passing upon these matters we shall recommend the improvement that is needed for the present or the immediately prospective needs. We have not in many cases gone to the depth that we anticipated might be re-

quired at some remote time in the future. I do not see any objection

if Congress is willing to do it.

Mr. HULBERT. If the East River project which was adopted in 1868, 49 years ago, had contemplated the needs looking very much into the future and had provided, for instance, 35 feet authorization, although at that time it was only intended to go to 26 feet, and in all these years Congress has been in session and could have appropriated the money if they saw fit to do so, in all probability the channel would be far nearer 35 feet now than it is at present?

Col. Newcomer. That is quite likely.

Mr. HULBERT. As a matter of fact, at the present time at Third Street Reef there is only 19 feet, although the project adopted in 1868 called for 26 feet the entire length of the stream; at Pilgrim Rock only 13 feet depth; at Ferry Reef only 24 feet; at Heel Tap Rock 20.5 feet; at Frying Pan Reef 23.8 feet; at Middle Ground 15.6 feet; and in the channel between North and South Brother Islands only 19 feet.

Col. Newcomer. Those are not in the best depths of the channel.

Mr. Hulbert. I appreciate that, but we have more necessity for
the depth on account of the commercial use than you have at Mobile

or Hillsboro?

Col. Newcomer. For the main channel.

Mr. Hulbert. The approaches to the docks. Vessels do not anchor and discharge cargoes in the middle of the stream; they proceed to the docks if accessible.

Col. Newcomer. Outside of the channel there is very shallow water

frequently.

Mr. HULBERT. There have been requests made to the dock commissioner of New York City for docking facilities for steamship lines that it is intended to establish between New York and points in South America, and the dock commissioner of the port of New York has not been able to provide the space for those lines because there is not the available space at the docks to which the boats of the intended lines can get access.

Col. Newcomer. That may be.

Mr. HULBERT. And that is due to the fact that there has not been any authorization or appropriation made in order to dredge out the approaches?

Col. Newcomer. I can not speak of that definitely. We would not

ordinarily dredge out the approaches to the docks.

Mr. HULBERT. I brought to the attention of Col. Newcomer and the committee yesterday the situation with regard to the Harlem River. In looking up that matter further last evening I found, according to the engineer's report, that you have not completed the additional channel at Macombs Dam Bridge. They have only 12 feet of water in the south channel. Those channels are very narrow?

Col. Newcomer. Quite so.

Mr. HULBERT. And the tide runs particularly strong at that point?

Col. Newcomer. It does, at times.

Mr. HULBERT. At certain changes of the tide it is advantageous to take advantage of the north channel whereas at other stages of the tide it is necessary to take advantage of the south channel.

Col. Newcomer. I do not think that the tide makes any difference in the one to be used. One of them never has been used; they have only used one of them.

· Mr. Hulbert. The other one has not been used, because it has not

been accessible?

Col. Newcomer. Exactly.

Mr. HULBERT. Because it has not been dredged out?

Col. Newcomer. I do not think the question of the tide makes any difference. Of course, it would be desirable to have both openings available.

Mr. Hulbert. The water in the Harlem River has been said to run

both ways, dependent on the tide?

Col. Newcomer. The tide does ebb and flow.

Mr. HULBERT. At the south end of the Harlem River there is a very strong current at high tide?

Col. Newcomer. Yes, sir.

Mr. HULBERT. And when the tide is running in they use one chan-

nel going in and the other out?

Col. Newcomer. I do not think the direction of the flow of the tide affects the use of one channel or the other at Macombs Dam Bridge. Of course, there may be some local condition affecting the matter that is not known to me.

The CHAIRMAN. Can you tell us the estimated cost of the 40-foot

commodious channel through Hell Gate?

Col. Newcomer. A 40-foot commodious channel is estimated at \$30,000,000.

Mr. BOOHER. And what is the estimated cost of a 35-foot channel? Col. Newcomer. A 35-foot commodious channel is estimated at \$8,917,000, which is a part of the \$13,000,000 project, which includes

some other work besides the 35-foot channel.

Mr. Hulbert. The 40-foot recommendation contained in Senate Document No. 3 was compiled pursuant to this resolution of Senator O'Gorman, because it was conceived that it might be necessary?

Col. Newcomer. The original inquiry was started by that resolution, but, as a matter of fact, this report was made to Congress in

compliance with the naval appropriation act.

Mr. Hulbert. The resolution was incorporated in the naval appropriation act?

Col. Newcomer. With certain changes; yes.

Mr. Hulbert. The act itself did not request specifically a report upon a 40-foot channel?

Col. Newcomer. No.

Mr. HULBERT. The Engineer Department of the War Department voluntarily suggested the 35 and 40 foot channels as being desirable?

· Col. Newcomer. The General Board of the Navy Department did that.

Mr. HULBERT. On page 196 of the last report, it is stated with reference to Port Chester Harbor:

As the result of the improvement, transportation by water has been rendered easier and safer, while the draft and registered tonnage of the largest vessels entering the harbor has increased. The financial benefits to the locality are indicated by the amount saved through the use of water instead of rail transportation for coal, iron, cement, sand, gravel, stone, brick, and lumber. This saving amounted to about \$154,700 in 1915.

The funds available June 30, 1916, together with those appropriated by the river and harbor act of July 27, 1916, will be expended for dredging in the channel opposite and below steamboat wharf to remove the bar which obstructs the approach to the wharves on the east side of the river and for removing rock projecting into the channel in the vicinity of Fox Island. It is expected that this work will be commenced in the fall of 1916, and that the funds will be exhausted by May 1, 1917.

Can that work be completed with the amount appropriated in the last bill?

Col. Newcomer. Yes, sir. Mr. Hulbert (reading)—

The dredged channel between Fox Island is narrow and navigation through it is made difficult by sharp bends. At and above Fox Island the channel is narrowed by projecting ledges. These conditions should be remedied as soon as practicable.

Have you given any further consideration to the effect upon the commerce of that locality by the omission of the \$26,000 that was carried in the last bill that passed the House for continuing the

improvement of that project?

Col. Newcomer. I do not think there has been any further consideration since we mentioned it the other day, when we first came to that item. That item was decided by the Chief of Engineers himself who had charge of the work up there and who is, of course, quite familiar with the locality. We have done some work, as indicated. The appropriation which was expected to complete certain work was not sufficient, and we made an additional allotment out of the lump-sum appropriation, because they ran into more expensive work than was expected. The situation is now better than it was before. I do not know anybody who questions the desirability of going ahead with the improvement as a general proposition, but the Chief of Engineers decided through his knowledge of the situation that it was not desirable to include the item at this time.

Mr. Hulbert. There is one other project. Do you know whether or not a considerable amount of commerce passing out of Newtown Creek on the East River has been intimately connected with the

supplying of the demands of warfare?

Col. Newcomer. I have no doubt it may have been. I am not

familiar with the details of the movement of traffic there.

Mr. HULBERT. The Nichols Chemical Co., one of the large industries there, shipped last year \$180,000,000 worth of chemical products much of which was used in warfare. Have you given any consideration to the congested condition which renders it almost impossible to move freight in and out of Newtown Creek with any expedition whatever?

Col. Newcomer. Yes, sir; we have.

Mr. HULBERT. But you have not felt that the exigencies of that

case warranted the inclusion of that project in this bill?

Col. Newcomer. No, sir; practically all of the tonnage to-day on the creek, which is very large, is on barges and lighters and does not require any greater draft than we have there now.

Mr. HULBERT. What was the occasion for recommending the new

project?

Col. Newcomer. It was in order to increase the channel dimensions, and permit a little easier movement. In fact, there was grave

doubt whether we should increase the depth. We did not increase the depth as much as proposed. If you increased the depth very much, the attempt to bring in the large ocean-going schooners would block up the channel for the passage of barges and lighters, which would be very serious. It was a question whether any additional depth should be given. We did recommend an increase of 2 feet in the depth, to 20 feet, I think, so as to bring in somewhat larger boats. They asked for 24 feet.

Mr. HULBERT. There was an offer made of local cooperation?

Col. Newcomer. No; I do not think there was any local cooperation.

Mr. Hulbert. I will refer you to the report.

Col. Newcomer. We recommended in the report that they be required to furnish the land; there was no cooperation offered in the cost of the improvement.

Mr. Frear. What is the total amount carried in the bill now,

\$26,900,000?

Col. Newcomer. \$26,893,000, as now modified.

Mr. Frear. How many new projects have been adopted in the

bill since the Mobile project was added and the others?

Col. Newcomer. If my understanding is right, there were 27, although I am not able to state from personal count. We have added to-day five.

Mr. Frear. What are they?

Col. Newcomer. Norfolk, Mobile, Lake Pontchartrain, San Diego, and Mare Island.

Mr. Frear. What is the total amount carried for the 32 new proj-

ects?

Col. Newcomer. I can not tell you. Mr. Brooker tells me that we had \$5,216,000 before for new projects. We have added to-day—I have given you the separate items—\$971,000.

Mr. Frear. That is for Norfolk? Col. Newcomer. No; the total.

Mr. Frear. You have \$1,000,000 for Mobile alone? Col. Newcomer. No, sir; we did not add anything there.

Mr. Frear. I do not mean the cash authorization, but the total that you will eventually spend for the new projects.

Col. Newcomer. I do not know. There was the \$5,000,000.

Mr. Frear. I understand. I should like to know what is carried by these 32 new projects.

The CHAIRMAN. We will get that information later.

Mr. Frear. Can not we separate these figures a little better, so as to know what is for maintenance, what is for continuation of projects and what is for new projects? We should have those things itemized.

Mr. Dupré. And what is for authorization?

Mr. Frear. Yes, sir; \$5,000 authorized at Mobile, which means an expenditure of \$1,000,000. That is very essential.

The CHAIRMAN. We will separate the items.

Mr. Frear. There are a number of places where we are carrying items of maintenance and continuation. That is kind of indefinite. It must be that you have the itemized figures and it seems to me it would be well to have those items separated.

Col. Newcomer. As I recall now there was only one item in New Jersey where we could not separate the amount required for maintenance and the amount required for improvement, but that was only a small amount, about \$21,000. The other items have been generally separated. In this item for Mobile, which we have just now authorized, we have used only the figure for maintenance, which is \$110,000. I think you can very readily pick out those items.

Mr. Frear. Take, for instance, the Delaware River and it is

continuing improvement and for maintenance, \$1,870,000?

Col. Newcomer. Yes, sir. In the annual report you will find that for maintenance the estimate is a certain sum and for continuing im-

provement another sum.

Mr. Frear. As we have not the annual report to date, it seems to me it would be well if we could have, without too much figuring, just such items separated in a tabulated list.

Mr. Dupré. Is there not a very practical and a very valuable benefit to be obtained by having these two propositions together so that

they may be interchangeable?

Col. Newcomer. For continuing improvement and maintenance?

Mr. Dupré. Yes, sir.

Col. Newcomer. That is not necessary for this reason: The law provides that any money appropriated for continuing improvement may be used for maintenance if necessary. It is not essential to discriminate in the appropriation. Of course the amount appropriated for maintenance is not available for improvement if it is appropriated for maintenance only, but if it is appropriated for improvement there is a provision which permits it to be used for maintenance if necessary.

Mr. Dupré. That is what I have in mind.

Col. Newcomer. In the use of the word "authorization" you should note the technical meaning of that term which usually prevails. An authorization usually means an authorization for contracts beyond the cash appropriation made. As a matter of fact, if you adopt a project and do not make any continuing contract authorization you do not authorize anything beyond the amount actually appropriated; you simply adopt the project and everything in the future remains to be appropriated as Congress may see fit. In other words, there is no authorization of the sum required for the completion of the project.

Mr. Frear. That always comes to us.

Col. Newcomer. Exactly.

Mr. Frear. Colonel, could we not in some way have in our report a statement, as suggested by Mr. Treadway, and I can see the importance of it to all of us, showing the amount that remains due upon an uncompleted project, the amount that will be necessary to complete it?

Col. NEWCOMER. That is in the report.

Mr. Frear. I understand, but very few people examine the report.

Would not that be of value in the report that goes with the bill?

Col. Newcomer. It is in the report that goes with the bill. Your report that goes with the bill gives that information, as I under-

Mr. Frear. That gives a great mass of figures.

Col. Newcomer. Yes. It might be well, possibly, to segregate that and give it item by item.

Mr. Frear. I was wondering if it could not be arranged in a more intelligible form.

Col. Newcomer. As I understood, that is wholly within the prov-

ince of the committee.

The CHAIRMAN. That has always been given heretofore. The total estimated cost of the project has not been given because that is always easy to obtain, but there has always been separated the amount appropriated for maintenance and the amount appropriated for the further improvement of projects and the amount appropriated for new projects.

Mr. Frear. Of course, if it was understood in reading an item which was only for ten or fifteen thousand dollars to start a project that \$150,000 was involved in the item, that might cause the House

to question the particular item. I do not know that it would.

The CHAIRMAN. We will now turn to page 27 and continue from the point we concluded yesterday afternoon, beginning with section?

Mr. Osborne. Mr. Chairman, if you will indulge me one question before we leave this matter, I want to ask Col. Newcomer what has

been cut out on Puget Sound and in Washington generally.

Col. Newcomer. We cut out Anacortes Harbor, Skagit River and Skamokawa Creek, but that is really down below on the Columbia River, and Lake River, Washington. That is also down on the Columbia. The only one on Puget Sound, I guess, was Anacortes and the tributary, Skagit River.

Mr. Osborne. You left in Lake Washington Ship Canal?

Col. Newcomer. Yes, sir.

Mr. Dupre. And also put in Grays River as a new project.

Col. Newcomer. Yes, sir.

Mr. Switzer. Is not the Skagit River project the opening up of a lumber region?

Col. Newcomer. I really do not recall. I would have to look that

up.

Mr. Switzer. I recollect that Mr. Humphrey made a speech on that item, and as I remember it, said that it was a lumber and logging proposition.

Col. Newcomer. I think that is probably it.

The CHAIRMAN. Gentlemen, Col. Newcomer has been called to the telephone, but in his absence I will read Section 2 on page 27:

Sec. 2. Where separate works or items are consolidated herein or hereafter and an aggregate amount is appropriated therefor, the amount so appropriated shall, unless otherwise expressed, be expended in securing the maintenance and improvement according to the respective projects adopted by Congress after giving due regard to the respective needs of traffic. The allotments to the respective works so consolidated shall be made by the Chief of Engineers as authorized by the Secretary of War. In case such works or items are consolidated and separate amounts are given to individual projects, the amount so named shall be expended upon such separate projects unless, in the discretion of the Chief of Engineers and the Secretary of War, another allotment or division should be made of the same. Any balances remaining to the credit of the consolidated items shall be carried to the credit of the respective aggregate amounts appropriated for the consolidated items.

The CHAIRMAN. I will read Section 3, because I think the committee will not require any discussion of the other section:

SEC. 3. That in all cases where the authorized project for a work of river or harbor improvement provides for the construction or use of Government dredging plant, the Secretary of War may, in his discretion, have the work done by contract if reasonable prices can be obtained.

Mr. Frear. What is that provision? Is that usually in the bill?

The CHAIRMAN. It is an old provision.

Mr. Frear. It has not been in the recent bills, has it?

Mr. HULBERT. How does that provision operate with respect to

section 6?

The CHAIRMAN. I do not think they conflict, because section 6 provides for all work done by private contract, while section 3, which we have just read, simply provides for where it is authorized to be done by Government plants and gives them the discretion of doing it by contract if they can obtain reasonable prices.

Mr. HULBERT. Provided the reasonable price is not more than 25 per cent in excess of what it would cost to do it by Government plant?

The CHAIRMAN. Yes.

Mr. Dupré. They can be read together without conflict.

Mr. HULBERT. I do not see why it would not be advisable to put that amendment in there.

Mr. SWITZER. It is a useless amendment, so far as that is concerned,

anyway.

The CHAIRMAN. In regard to section 3, as I understand the practical administration of the law, it sometimes happens that they can use the Government plant more advantageously on another improvement and get a very low contract price for the particular project which was authorized to be done by Government dredge, and this enables them to change from Government plant to private contract.

Mr. Frear. Mr. Chairman, what occurred to me was that we are building these dredges constantly at large expense for the purpose of having the Government undertake the work, and I can see by this provision that the Secretary of War may at any time, if he deems it advisable change from Government plant to private contract

advisable, change from Government plant to private contract.

The Chairman. Col. Newcomer, I have just read section 2, and we have had practically no discussion of it, except the question has been asked to what extent this is new legislation, and I have not compared it critically with the past laws to point out the extent to which it is new.

Col. Newcomer. This is substantially the same item that was put in the act of 1912 to provide for the consolidations that were made that year, so that it is not new legislation. The only change, as I recall now, that was made at all was in the phraseology, wherein it is stated that the allotment to the respective works so consolidated shall be made by the Chief of Engineers, as authorized by the Secretary of War. I think it was phrased before "shall be made by the Secretary of War upon the recommendation of the Chief of Engineers."

Now, as a question of mere administrative handling of the matter, as these amounts are practically all very small, I thought it was more than likely the Secretary of War would authorize the Chief of Engineers to make the allotments of these small sums, within a certain limit which would be agreed upon, and I thought that was better administrative action than to have phraseology which would appear to indicate the necessity for going to the Secretary of War for all

these little sums—in some cases where it is a question of allotting \$1,000, \$2,000, or \$3,000.

Mr. Frear. Colonel, why has this provision been left out of all the

preceding bills? You say it was in the act of 1912?

Col. Newcomer. Of course, it was not necessary to repeat it because it covered the situation so far as those cases were concerned.

The CHAIRMAN. Colonel, may I correct you by saying that you

probably intended to refer to the act of 1913 instead of 1912?

Col. Newcomer. Yes; section 7 of the act of March 4, 1913, reads:

SEC. 7. That where separate works or items are consolidated in this or subsequent river and harbor Acts and an aggregate amount is appropriated therefore the amounts appropriated shall, unless otherwise expressed, be expended in securing maintenance and improvements according to the respective projects adopted by Congress, after giving due regard to the respective needs of traffic. The allotments to the respective works consolidated shall be made by the Secretary of War upon recommendations by the Chief of Engineers. In case such works or items are consolidated and separate amounts are given with each project, the amounts so named shall be expended upon such separate projects, unless in the discretion of the Secretary of War, another allotment or division should be made of the same. Any balances remaining to the credit of the consolidated items shall be carried to the credit of the respective aggregate amounts appropriated for the consolidated items.

Mr. Dupré. Apparently this adds the words, "upon recommenda-

tion by the Chief of Engineers."

The Chairman. In answer to your question, Mr. Frear, upon comparison this is substantially existing law, except instead of having to go to the Secretary of War for each specific item of transfer of appropriation, it gives the Chief of Engineers a larger discretion, so that he only has to have general authorization of the Secretary of War.

Mr. HULBERT. In other words, it is reenacted to meet the situation

created by this further consolidation of items?

The Chairman. Yes; because there are more consolidations.

Mr. Frear. The difference between the situation now and when that act was passed is that you have been constantly grouping or consolidating many of these projects, which had never occurred to the same extreme in past years, has it?

Col. Newcomer. Not so extensively; no, sir.

Mr. Frear. You have some items where you have grouped 29 dif-

ferent projects.

Col. Newcomer. I will have to plead ignorance. I did not know that this section 7 was in the act of 1913. I had overlooked that. We do not need this section here, because that section provides the necessary authority, except for a slight improvement in wording.

Mr. Frear. So the only purpose now is to group as many as possible, and then the Secretary of War would practically have the determination and could change the appropriation from one to an-

other if he desired. He would have that power.

Col. Newcomer. It is the same power that applied to the former

consolidations.

Mr. Frear. And the additional number grouped in each bill would have the effect of giving him that power.

Mr. Dupré. The act of 1913 says "hereafter." Col. Newcomer. Yes; I did not realize that.

Mr. Frear. For that reason, we have not understood the force of that provision in connection with this increase in the grouping.

Col. Newcomer. It becomes more important, of course, by reason

of the fact that it is so much wider in scope.

Mr. Frear. In other words, if we took all the projects, and gave the total amount of \$26,000,000 and left it at that, the Chief of Engineers, if it was grouped in one project, would have the opportunity of using the money as he chose on the individual projects?

Col. Newcomer. Certainly.

Mr. Booher. He does that with every lump-sum appropriation.

Mr. Frear. Yes; with lump-sum appropriations.

The CHAIRMAN. Colonel, does the department express any preference for the language of section 2 over the language of section 7 of

the act of 1913?

Col. Newcomer. The only distinction is in the matter of handling the allotments, and it seemed to me it was a little bit better this way. I do not know that it makes any substantial difference. Even under the other section the Secretary of War could authorize the Chief of Engineers to make the allotments up to certain amounts. seemed to me that this language would be better.

The CHAIRMAN. Col. Newcomer expresses the opinion that the slight difference in the veribage makes the section here recommended

a little more favorable.

Mr. Frear. Mr. Chairman, the point does not occur on that, but upon the enlargement of groups, which, of course, enlarges the power. The question is whether the committee wishes to abdicate the rights which they have in determining the specific amounts to be given and permit, say, 29 projects to be put in one group-Mr. Dupré. Right here I want to say for the record—

Mr. Frear (continuing). We have never grouped so many before. Mr. Chairman, I fear I have not made myself clear. The law is the same in this bill, but by changing the number of items that can go in a group you make the application more serious so far as the committee is concerned.

Mr. Dupré. Right here I want to say for the record, and I want to ask Mr. Frear, ought not that to meet with your approval, in view of the fact that you have always contended for lump sums rather

than individual appropriations?

Mr. FREAR. I am very glad the gentleman has asked that question, because whenever I have asked for a lump-sum appropriation it has been because the Army Engineers were unable in any other way to throw out many worthless projects, and that has enabled them, by a reduction of the total amount, to distribute it among the projects they thought were necessary.

Mr. Dupré. In other words, you do not want any appropriation

at all.

Mr. Frear. Oh, yes; I do, by all means.

The CHAIRMAN. When you express the opinion that that is the only method by which the Engineers can discard useless projects, that ought to be accompanied by the statement that that is your opinion and you are not quoting the Engineers, nor would Col. Newcomer confirm that.

Mr. Frear. No; I accept the amendment of the Chair.

The Chairman. We have been all over that matter, but I would like to say this: Individually, as a member of the committee, I am opposed to abdicating any essential function of this committee in the matter of legislation for river and harbor improvements; and at the same time, individually, I think that this grouping as recommended by the department does not amount to substantially any abdication of the functions of the committee, but does make for better administration.

I say it does not amount to any abdication of any of the functions of the committee, because in making up the aggregate amount of maintenance for a group of items we take the report of the Chief of Engineers containing the estimates for maintenance, subject to any modifications of those estimates by the Chief of Engineers based on conditions subsequently occurring, and then the committee, approving each item necessary for the maintenance of the project, simply gets the aggregate result at the end. Therefore the committee has fixed the aggregate amount carried for the maintenance of the group The advantage of it in administration is this: As long as the conditions of all of these improvements remain the same during the time the appropriation is available, the Chief of Engineers will expend the money in accordance with the original estimate; but subsequently if there have been changes by reason of unanticipated deterioration or of storms or of any other conditions which were not anticipated, then he may divert a part of that aggregate sum appropriated from the improvements for which the segregated estimates were originally made to the maintenance of these other projects for which no original estimate was made, and to that extent it certainly makes for better administration and enables them to meet unanticipated conditions.

Mr. Frear. That explanation is undoubtedly true, Mr. Chairman; but to just give the effect of this proposition we are now indorsing and which has never been accepted before to the same extent, there are 29 projects on page 9, from lines 3 to 11, amounting to \$15,800. It may be that some of those projects are not valuable or worthy projects, and it may be that all that money is to be expended on one project. The Chief of Engineers, under the law as we have placed it here, can put all of that money on any one of those projects, whether the Congress wishes to drop it or not. He is empowered on any of

those 29 projects to expend the entire appropriation.

The CHAIRMAN. But as just stated, they will expend the money in accordance with their original estimates unless conditions subsequently change which make diversions necessary, and we must and can trust the Engineers to intelligently and fairly consider any subsequent changes and then determine whether any diversion is necessary.

Mr. Frear. Then, Mr. Chairman, heretofore in giving the specific items and the specific amounts for each item in all these projects, which has been done in all the years past, the committee has not been using the best method of making appropriations because they have been made specific for the various items heretofore.

The Creative T would not want to reflect upon part of

The CHAIRMAN. I would not want to reflect upon past commit-

Mr. Frear. I would not want to do that either.

The CHAIRMAN (continuing). Because there have been some able

committees among our predecessors.

Mr. Switzer. Mr. Chairman, regardless of the mistakes of the committees and Congress in the past, I want to refer to the statement that Congress can not drop a project—that is, if they want to drop a project, they can not do it. Under this language the Army Engineers and the Secretary of War have authority to divert funds from one project to another, but if Congress thinks any of these projects are unworthy or the committee thinks that, the committee can drop it out of the bill or Congress can drop it out of the bill when it is being considered.

The CHAIRMAN. You have well stated it. Every one of these improvements in these groups have at some time been under improvement by the United States, and if any member of the committee in any one of these groups should upon information which he wishes to submit base a motion to strike out any one of them from the group, it is his privilege and duty to do so, giving his reasons

therefor.

Mr. Gallagher. Could not the Congress do that?

The CHAIRMAN. Yes.

Mr. Gallagher. I understood Mr. Switzer to say that Congress could not drop a project.

Mr. Switzer. No; I said that Congress could do so.

Mr. OSBORNE. Mr. Chairman, I will plead to the committee the valor of ignorance. I am a new member, not familiar with the procedure of the committee, but I am familiar with the general feeling of people outside—the people who criticize river and harbor bills, and so on. I have in mind the fact that there has been, as you all know, a great deal of criticism in the newspapers and among the public in regard to these bills. Now, I do not know whether my idea is worth anything or not, but I believe that there would be less criticism if you were absolutely definite in everything you do here; leave nothing to be ambiguous or indistinct. In this bill here, as has been stated, there is one paragraph where a large number of places are mentioned, and for some of them no appropriation is to be made at all. Now, the impression upon the public mind in looking at all of these unfamiliar and obscure names is that the members of the River and Harbor Committee are squandering a lot of money on places that nobody ever heard of, because such people do not look into the matter closely. I think, as a matter of policy, it would be far better to put your appropriation to the particular item it belonged to and leave out just as many names of places that have nothing to do with the bill as you are able to. I think you would make a better impression upon the public mind. Where you have 30 projects and only one or two places where you are going to spend any money, just name those one or two places and leave out the other places. I just give you that thought for what you may think it is I have not any settled convictions about it and do not wish to impress my ideas unduly on the committee, but I give you that as my impression.

The CHAIRMAN. We are very glad to have your expression of

opinion, Captain.

Mr. Gallagher. I was going to ask Col. Newcomer in regard to the paragraph to which Mr. Frear refers containing all these various names of places. Are they little streams or branches out of the Cheasapeake Bay?

Col. Newcomer. Yes, sir. Mr. Gallagher. What boats operate on those rivers?

Col. Newcomer. Principally, of course, the fishing boats; but there are steamers, of course, from Baltimore.

Mr. Gallagher. But all the steamers which operate on those rivers

are Pennsylvania Railroad steamers, are they not?

Col. Newcomer. I do not know. The Pennsylvania Railroad, I know, has some lines; but whether they own all of them or not I do not know.

Mr. Gallagher. Do you know of any others except Pennsylvania

Railroad steamers operating there?

Col. Newcomer. I think there are some.

Mr. Gallagher. I do not know of any. Col. Newcomer. That is my impression, but I am not certain. Of course, that question was taken up, I believe, with the Interstate Commerce Commission, and they were permitted to operate those boats, I think, but I am not certain about that. They are an extension, of course, of their lines and not competitors.

The CHAIRMAN. I think the Pennsylvania Railroad has been compelled by the Interstate Commerce Commission, under the provisions of the section in the Panama Canal act, to part with their ownership as to some of their steamboat lines operating from Baltimore

because they were competitive.

Mr. GALLAGHER. I do not think there is any commerce on any of the streams down there except what is carried in the Pennsylvania

Railroad boats.

Mr. Costello. Mr. Chairman, let me say just a word. Many of these streams are on the Eastern Shore of Maryland and the railroads are 15 or 20 miles away. I do not know who operates the steamboats and I do not care. Sufficient for me to know it is the only means of communication that those people have. That satisfies me as to the justification for my vote. Now, as to grouping these items. Take the Eastern Shore: I think there are something like 30 of those items involving an expenditure, under the grouping, of \$15,800. I do not think there is anybody—the War Department, the Board of Engineers, or anybody else—who would be able to say what portion of that amount would be utilized on any particular one of those streams. I believe that method is one which tends to efficiency, because there might be something on one of those rivers occur, due to increased tides, storms, where an emergency arises, and this money would be available to correct whatever wrong Therefore, I believe that is a good step in the direction of efficiency by the War Department in taking care of just such small rivers as the ones I have referred to. If we can not trust the War Department to give efficient administration of items of that kind, we had better go out of business.

Mr. OSBORNE. Mr. Chairman, on the other side of the question, here is a group of small streams, and I agree with my friend that they ought to be taken care of, but that is not a fair illustration of the

question. For instance, in my own district, my friend, Mr. Kettner, lives about 150 miles from where I do, and San Luis Obispo is about 125 or 150 miles still farther away, the two extremes being about 300 miles—about as far as from Norfolk to New York Harbor. We are all included in one item of maintenance, and they are harbors that have no connection with each other whatever. It seems to me that they ought to be separate. For places like the ones you mention, I do not think there is anything out of the way about it, but where we are 250 or 300 miles apart, I think they ought to be separated and the particular places mentioned in the bill as separate propositions.

Mr. Costello. Do you ever use the same dredges?

Mr. Osrorne. Oh, no; as I say, they are as far apart as Norfolk

Harbor and New York City.

Col. Newcomer. I wish to say, Capt. Osborne, that there is one thing that will be of particular interest to you in connection with Los Angeles Harbor. Los Angeles Harbor has been subject to very grave deterioration at times by reason of flood action and the discharge of silt from streams entering the harbor. To keep on hand an appropriation sufficient to handle all possible emergencies there would probably be further than Congress would be willing to go, but you are subject there in a much greater degree than in any of the other localities to that contingency. If you have a fund provided for all three which is applicable in case of need, you are in a safer position than if you only had a part of that fund appropriated for you and the other part not available.

Mr. Boomer. Colonel, there is no difference in the principle of this matter whether you put five projects or 29 projects in a group?

Col. Newcomer. The principle is just the same.

Mr. Booher. It seems to me that this matter can be reached, if the gentlemen are not satisfied with it, by limiting the number that should be grouped together by an amendment; but this law has been in force since 1913 and it has been found to work very well.

The CHAIRMAN. I think we have been grouping them further back

than that.

Mr. Booher. Yes. I do not think it was a law but simply a custom of the committee. I think before they were grouped by common consent of the committee and Congress would adopt them in groups as reported in the bill. I think in a good many instances, probably, we get too many in a group, and when members want to limit it to a certain number in a group, they can do so, but I would hate to change this method altogether because we would have a great deal larger bill and we would not accomplish any more than we accomplish in this way.

Mr. Gallagher. I would like to ask Judge Booher if he has any

knowledge of how this has worked.

Mr. Booher. I have never heard any complaint, Mr. Gallagher. The CHAIRMAN. I think it has worked very well, Mr. Gallagher. Mr. GALLAGHER. I just wanted to know if he had any knowledge of how it has worked.

Mr. Booher. I do not know how it works, but I never heard any

complaint, and that is all I can say.

The CHAIRMAN. We have had this method of grouping for five or six years, and Col. Newcomer can tell as to how it has worked.

Mr. Gallagher. But Judge Booher was making the statement that it seemed to work very well and I did not know but what he had particular knowledge about it.

Mr. Frear. Col. Newcomer, what is the largest number ever placed

in one group prior to 1904?

Col. Newcomer. I do not know.

Mr. Booher. Mr. Chairman, I just want to reply to my friend Gallagher in this way: I made the statement that it had seemed to work very well because I had heard no complaint about it. That is the only way I have any means of knowing, and usually when a thing does not work well you hear a noise.

Mr. Gallagher. All the noise I hear that things do not work well is in reference to a general bill. That is what they make all the

noise about.

Col. Newcomer. Mr. Frear, I have the impression that the largest number of items prior to 1914 was 11, some tributary waters of Galveston Bay. I am not positive about it.

Mr. FREAR. That took in all that inland waterway, did it not?

Col. Newcomer. No; it was entirely distinct from the inland waterway. The tributary waters of Galveston Bay, Trinity River, Anhuac Channel, Oyster Creek, and Cedar, Chocolate, Turtle, Bastrop, Dickinson, Double and East Bay Bayous.

Mr. Frear. What year was that?

Col. Newcomer. I do not remember. They have been combined for a number of years, but I do not know how far back.

The Chairman. If there is no further discussion under section 2,

we will proceed.

Col. Newcomer. I think, Mr. Chairman, it might be well to answer the question that has arisen as to what advantage has been found from this method of grouping. I can state the experience of the department. The experience of the department has been that it has proven very desirable and very advantageous. It has afforded the very opportunity which we urge now as a merit, taking care of unforseen difficulties which we can not anticipate in advance. Of course, what the conditions will be on each of the streams we know in a general way from experience, but we can not anticipate in detail, and it has afforded us an opportunity of shifting expenditures. That has occurred just in the past several months. A number of cases have come to my notice where the work on particular channels has proven to be more expensive than anticipated and we were able to provide for it.

Mr. Frear. May I inquire if you have not \$1,000,000 left from the fund that was appropriated several years ago in a lump sum with

which to provide for all immediate necessities?

Col. Newcomer. No; not all immediate necessities.

Mr. Frear. I mean it can be applied to anything—

Col. Newcomer. It can be applied to necessities in so far as it will go.

Mr. Frear. It can be applied to anything which is regarded by the engineers as necessary?

Col. Newcomer. Yes, sir.

Mr. Frear. And that fund can be used at any time?

Col. Newcomer. That is available for necessities as they arise. As I said before, we expected that would all be required to take care of

the plants and necessary expense of supervision and matters of that kind. As a matter of fact, I might inform the committee that in view of the possibility of the failure of any river and harbor bill this year we have been looking around to see to what extent allotments made from that appropriation might be recalled and made available for more urgent or more essential work. You understand that in making these allotments the work does not proceed sometimes with the expedition we expect, so that it may be a matter of a couple of years before the expenditure is actually made, and it is very likely we could supplement that \$1,000,000 by some additional amount withdrawn from other places. But that is now the unallotted balance.

The CHAIRMAN. Your reference to a river and harbor bill at this session, Colonel, induces me to ask you this question, as to the attitude and opinion of the War Department as to the necessity of a

river and harbor bill at this session.

Col. Newcomer. It is very thoroughly convinced that it is a matter of great importance. I do not think there was ever a time in the history of the country when it was so important as it is at present to make provision for all transportation facilities, and we certainly regard this bill as making an important provision of that character.

Mr. Frear. And you feel, Colonel, that all these propositions that have been put into this bill are imperatively necessary at this time? Col. Newcomer. I think possibly a categorical yes as an answer to

Col. Newcomer. I think possibly a categorical yes as an answer to that question might lead to some misunderstanding. We do not mean to say that each one of these little items for maintenance here is essentially necessary. They may not be actually required in all cases, but we ought to make provision for those things. We can not keep the channels of the country open and free and unobstructed for commerce, as they have been provided by the Government, unless we have a maintenance fund, and the sum we estimate here is the sum in our best judgment required for such maintenance.

Mr. Frear. In the case of the Columbia River, you have just reduced that by \$975,000 on the bald statement of the division engineer, notwithstanding that appropriation has been recommended

to Congress and been placed in the preceding bill.

Col. Newcomer. Exactly.

Mr. FREAR. Is the average item placed in this bill determined upon

evidence of that weight?

Col. Newcomer. The items are all placed in this bill upon the testimony or information submitted by the district engineer, in reports of this kind and in documents which are submitted to Congress. This particular instance of a change in the policy of administering that work has been, of course, a new element which has arisen. It is on a very much more extended scale than the contingencies we want to provide for in the group system; but we took advantage of the fact that that work need not be carried on to report it at once to the committee so you need not appropriate money we find now is not needed. In other words, we want to give you all the information we have.

Mr. Frear. And you think the Richmond Harbor and some of the projects which have been questioned here are more important than the mouth of the Columbia River?

Col. Newcomer. More important in their further prosecution now. Of course, they are not more important, by any means. The mouth of the Columbia River is far more important than Richmond Harbor,

but it does not require the expenditure of money now.

Mr. Costello. Col. Newcomer, in reference to the statement you just made, I interpreted that to mean that you had accomplished with the amount of money that was expended there all that was necessary for the efficient use of that river, and this additional expenditure is simply to add to the improvement and would not affect its

efficiency at all?

Col. Newcomer. Only as it affects its maintenance; in other words, those jetties, particularly, are subject to storm action and to deterioration. The deterioration in this case has not been as great as was expected during the last winter and it is mainly during the winter that these things occur. For that reason the district officer now reports a condition there which he considers adequate to last over the coming year, and he thinks, under present conditions of advancing prices and greatly increased cost which was not anticipated when the former estimate was made, the work ought to be suspended for a year.

Mr. Frear. Of course, that reference to the greatly increased cost

applies to all these projects.

Col. Newcomer. Undoubtedly. That is unfortunately the case. Mr. Hulbert. Are there any projects left out of this bill more important than any of those in it?

Col. Newcomer. Well, I do not know---

The Chairman (interposing). I submit, gentlemen, to ask Col. Newcomer to make comparisons is not altogether fair to him.

Mr. Hulbert. It is only a corollary of one that was just put to him

by another gentleman.

The CHAIRMAN. I think we should let him speak of individual projects, but a matter of comparison is a matter of argument.

Mr. HULBERT. If the chairman feels it is not a proper question, I

will not press it.

Mr. FREAR. I assume in all these matters the Colonel is not speaking for himself, and we do not hold him responsible for the judgment expressed on these projects. I assume it is the policy of the

department.

Col. Newcomer. To answer Mr. Hulbert's question, I did not, of course, regard some of these projects provided for in this bill as more important than some of the new projects left out, by any means, except for the expenditure of the small sums proposed. Some of the new projects I consider more important, taken in a large national way; but here is a facility of navigation which has been provided and which the Government has undertaken an obligation to maintain, and the people are dependent upon it, and the cost involved usually is minor, whereas the cost involved in taking up new projects may often be very great. These small sums would not accomplish as much good on the larger projects as on the smaller.

Mr. Hulbert. Let me be specific. Do you consider the project for

Mr. Hulbert. Let me be specific. Do you consider the project for the improvement of the channel between Staten Island and Hoffman and Swinburne Islands as more important than the anchorage

grounds off the Statue of Liberty?

Col. Newcomer. I consider the expenditure of the \$50,000 that is proposed in this case as better applied in that channel than the other.

Mr. HULBERT. But you did not think that last February.

Col. Newcomer. Why not?

Mr. Hulbert. Because you did not say so. Mr. Switzer. Mr. Chairman, has not this question and answer been put in the record at least once or twice before?

The CHAIRMAN. I think it is somewhat of a repetition, but still we

want to vield every courtesy to Mr. Hulbert.

Mr. HULBERT. I will not press it as long as Mr. Switzer objects.

Mr. Switzer. I did not object; I just asked the question.

Mr. Treadway. Mr. Chairman, I would like to ask a question, if that matter is closed.

The CHAIRMAN. Unless Mr. Hulbert wishes to continue. Mr. HULBERT. I have stated I do not care to press it.

Mr. TREADWAY. I would like to ask if the suggested bill we are now considering is not rather more in the nature of a recommendation from the Chief of Engineers or the board, as the case may be, than in the framing of previous bills—that is, our previous method has been that you have submitted certain data to us which we had in these group books, and from that the committee made up its own mind as it went along from item to item and changed the amounts as they might see fit, you simply furnishing the data? If this bill is prepared by the department and recommended to us, are you not in that way—I am not criticizing you—offering rather more initiative advice and suggestions than in framing bills previously?

Col. Newcomer. Unquestionably. I do not know of any other case, in fact, where the department has ever presented a bill in this form, and it arises simply from the situation that developed as to what sort of bill, if any, would be considered by this Congress. We understood, and we were very much pleased when we got the information, that the bill as it was passed before would probably be repassed. Then we got a request that we prepare a bill which we could recommend, pruning it down as much as possible, as required under the present conditions. It is for that reason we took it up in that way. I do not know that it has ever been done before, and

I can assure you I do not want to do it again.

The CHAIRMAN. We will now proceed to section 3:..

Sec. 3. That in all cases where the authorized project for a work of river or harbor improvement provides for the construction or use of Government dredging plant, the Secretary of War may, in his discretion, have the work done by contract if reasonable prices can be obtained.

Colonel, is that new, and will you explain the purpose of it?

Col. Newcomer. That was introduced in the Senate Committee on Commerce with the idea, particularly in view of the present situation of the cost of construction of Government dredges, that where a project provides for a dredge, as for instance, at the mouth of the Brazos River, it may be preferable, instead of constructing the Government plant at this time, to do the work by contract until conditions are more favorable for building the dredge. It is simply a precaution in the interest of economy in the present administration of the work. We have hitherto had authority of law for doing work by hired labor where contracts are provided for, and here is

practically the reverse of that proposition.

The CHAIRMAN. Colonel, you handed me the other day a recommendation for a legislative provision, and I will now read a new section of general law which has been recommended by the War Department.

That amounts hereafter paid by private parties or other agencies for rental of plant belonging to river and harbor work shall be deposited in each case to the credit of the appropriation to which the plant belongs.

Colonel, will you explain the necessity for that?

Col. Newcomer. The practice of the department with reference to the rental of Government plant for private work has been to permit it only in cases where a private plant is not available, as we do not want to enter into competition with private plants, and where also the Government plant can be spared at the time from the Government work. Now, the method of arranging the charge for that was to include the operating expenses of the plant on the work and a reasonable additional sum to cover the proportionate share of the annual cost of repairs and maintenance and upkeep of the plant. first that was all arranged as one sum, usually figured at so much per day. We found the auditor required us to deposit those sums in the Treasury to the credit of the surplus funds, so that the appropriation did not get the benefit of it. In other words, in paying the operating costs of the dredge the appropriation was really depleted by a certain amount. Then, to avoid that in part, we made arrangements after that to make them pay the operating cost and a rental, the rental in that case being to cover only these other elements of depreciation and annual repairs, etc.

Then the auditor permitted us to deposit the operating costs which had been paid out of the appropriation back to the appropriation, but he still requires the payment of the rental into the surplus funds of the Treasury simply because there is no law authorizing it to go to the appropriation, and there is a general law which says that receipts unless otherwise specified by law shall go into the surplus Now, there is a law that where a dredge belonging to one appropriation is used under another appropriation for river and harbor work the Secretary of War can make the proper adjustment of the credits between the appropriations; but if it is rented to private parties, or if it is rented to another department of the Government, our appropriation loses that amount which really ought to go to the maintenance of the plant, and this is simply to provide a better bookkeeping principle to cover that situation whenever a plant is used in that way, as it is every now and then, and the rental received should go to the credit of the appropriation which is responsible for

the upkeep of that plant.

Mr. Frear. Why could not that plant be used in some other place? We are short to-day of sufficient dredges, I understand, to do the Government work, and we are engaged in contract work all over the country. Why can not any Government plant that we have be utilized by the Government in some other place?

Col. Newcomer. We have that authority now, Mr. Frear, and we

are doing it.

Mr. FREAR. Have you in the past rented these plants out to pri-

vate parties?

Col. Newcomer. In a number of cases. The renting to private parties is usually only a question of a few days' work; say they want to get a channel to their dock or something of that kind and there is no private plant available, they get the Government plant which is at work in that vicinity. We have very frequently transferred dredges from one appropriation to another and worked them an entire season; as, for instance, the dredge, the Government dredge, was taken from the Ambrose Channel and put at work on Pollock Rip. There have been a number of transfers of that kind.

Mr. Frear. How much money would you say was received a year from the rental of this Government property to private parties?

Col. Newcomer. It is not a considerable amount at all. I really do not know. It may run possibly into as much as twelve or fifteen thousand dollars altogether. That is simply a guess. Of course all those papers pass through my hands and I know in a general way. They come in every week or two. There will be a request from some point for a dredge and it is usually work for a day or two or as much as a week.

Mr. FREAR. Is not the Government using the dredge? Is the Gov-

ernment dredge idle at that point?

Col. Newcomer. It may be when they apply for the Government dredge that we can not spare it, but very frequently they apply for it when the dredge can be spared.

Mr. Frear. Does the Government employ its workers on these pri-

vate works?

Col. Newcomer. The Government employs the workers on the dredge.

Mr. FREAR. That authority has been given under other laws, has it not?

Col. Newcomer. I do not know whether there is any authority of law covering it or not, but I know that the Secretary of War has exercised that authority for a considerable time past. It is nearly all, of course, work associated with the work of improvement in the channel.

Mr. Frear. So that any private plant that desires to have dredging done can apply for it, and the Secretary of War is authorized under existing law to allow the Government plant to be used for that

purpose?

Col. Newcomer. He does that if there is no private plant available. We want to avoid competition with private plants, of course. If the dredge can be spared from the Government work it is done. I might state that the dredges are unfortunately idle a good deal of the time simply because the conditions do not require their operation. That is when they are used for maintenance. They are required to operate sometimes only two or three months in the year in maintaining a channel.

Mr. Frear. Are they kept on that channel all the rest of the year? Col. Newcomer. That depends, of course, on whether there is any occasion to use them elsewhere. Take, for instance, the dredges on the Mississippi River: We have there a large dredging fleet, and unfortunately in that case the time of operation is very short, but there

is no particular occasion to use those dredges elsewhere. They are pipe-line dredges and not seagoing dredges, and there is no other place within a reasonable distance where they can be used, and, therefore, they are kept up at whatever expense may be necessary in order to maintain the channel. When the dredges are not in operation, they are usually put out of commission and the crews laid off. If the Government plants can be spared from Government work, they can be used in doing some private work of this character.

Mr. Dupré. Is the Government paid for that?

Col. Newcomer. Yes, sir; the Government does not lose anything on the proposition, and we see that the charge is sufficient to bear all of the expense that the Government is put to, not only in the actual operation of the dredge on the work, but also for a due proportion of the annual cost of repairs.

Mr. SWITZER. As I understand it, on the Pacific coast you have to

have more seagoing dredges?

Col. Newcomer. Two more have been recommended. We have now on the Pacific coast several dredges that have to be shifted around a great deal from one port to another. Those seagoing dredges are liable to be shifted around more than the others because they have a number of harbors to maintain.

Mr. Gallagher. If a dredge is loaned or rented out in that way, why should the particular project receive credit for the earnings

of the dredge?

Col. Newcomer. Because the project has to keep up that dredge. Mr. Gallagher. But we have already made appropriations suffi-

cient to do the work on the project.

Col. Newcomer. We do not make any charge as a profit. The Government is not going into this business for the purpose of making money, but the charge is only such a charge as is sufficient to maintain that plant, in so far as its relation to that project—

Mr. Gallagher (interposing). But we make appropriations for that. Why do you credit the appropriation for that project with

the earnings of the dredge?

Col. Newcomer. For the reason that the plant is used on that work. It is there, and for a certain length of time the annual repairs on that dredge have to be paid out of the appropriation. We think that that work which it does ought to pay for those repairs, but if you put the rental into the general fund it is not available for paying up its share on account of the repairs, and your appropriation which is made to do such work is depleted by that amount.

Mr. Gallagher. It is a contingency, and are not the contingencies covered in the general appropriation? Does not that cover time

lost by the dredge and everything else?

Col. Newcomer. You do appropriate sufficient money for that, but if this rental goes into the surplus fund, don't you see that the corresponding expense that has to be taken from this appropriation to pay that cost must be met, and the Government work is made to cost more than its proper share? Now, we think that the service which it has performed for other parties should not be made a source of general revenue and no part of its cost should be met at the expense of the appropriation. Of course, that is a matter of bookkeeping largely, but it is bookkeeping in favor of fair treatment of the appropriation.

Mr. Frear. The effect of this would not be to increase the rent of dredges to private parties? Col. Newcomer. No, sir.

Mr. Frear. Of course there would be no inducement on the part of Government officials to do that, because it goes into the general treasury fund.

Col. NEWCOMER. There would be no such inducement in other cases, because we do not do it for profit at all. We charge what ex-

perience shows is the amount required for upkeep.

Mr. Gallagher. But, if it should be given to you to spend again instead of being appropriated, you accumulate a certain amount of

money more than you would otherwise have?

Col. Newcomer. There have been one or two instances of that kind. Take the Ambrose Channel, for instance: The Ambrose Channel was maintained at a much less annual expenditure than was anticipated, and the dredges that were provided for the construction and maintenance of that channel have since been rented to other improvements, and those other improvements have paid to the Ambrose Channel funds which have been sufficient to maintain those dredges, and its own appropriation did not have to stand the entire cost of the annual upkeep of those boats. It has been to the advantage of both. It was to the advantage of the appropriation that got those dredges and an advantage to the Ambrose-Channel appropriation.

Mr. Booher. I would like to ask a question in regard to this lan-

guage. This language reads:

That the amount hereafter paid private parties or other agencies for the rental of plants belonging to river and harbor work shall-

And so forth.

Ought not that to read:

That the amount hereafter paid by private parties or other agencies for rental of Government plants used in river and harbor work.

Do not the plants belong to the Government and not to river and harbor work?

Col. Newcomer. That would be a very acceptable change.

would be better.

The CHAIRMAN. Is there any further discussion on this proposed If not, we will take up the next section. Section 4 is amendment? as follows:

Sec. 4. That for examinations, surveys, and contingencies for rivers and harbors for which there may be no special appropriation, the sum of \$200,000 is hereby appropriated: Provided, That no preliminary examination, survey, project, or estimate for new works other than those designated in this or some prior act or joint resolution shall be made: Provided further, That after the regular or formal reports made as required by law on any examination, survey, project, or work under way or proposed are submitted no supplemental or additional report or estimate shall be made unless ordered by a concurrent resolution of Congress: And provided further, That the Government shall not be deemed to have entered upon any project for the improvement of any waterway or harbor mentioned in this act until funds for the commencement of the proposed work shall have been actually appropriated by law.

I might say, after making inquiry of Col. Newcomer, and according to my recollection, that is the language which has been used in former river and harbor bills, except. of course, as to the amount of the appropriation.

Col. Newcomer. Yes, sir.

Mr. Frear. Do you think that it is advisable to go on making those surveys at this time? What is the disposition on the part of the

Engineers with regard to that?

Col. Newcomer. We, of course, have no special interest in promoting these examinations at this time, and I do not know really what examinations are contemplated here. However, we thought that there was no objection to making such examinations as time will enable us to make. We will be handicapped, of course, by the calling off of many of our officers from river and harbor work to military service, but at the same time we will have in each river and harbor district an organization, and these things can be looked after if you deem it desirable to do so.

Mr. Frear. Do you think that it would be any injury to the navigation interests or the commerce of the country if this was all

stricken out?

Col. Newcomer. I think that it would be desirable, on the whole, to make this provision. In other words, I think that some provision for looking after the additional improvements required is very desirable. Just how desirable any particular item in here is, I do not know, because we do not know before investigation what is contemplated in each item, but I think that you should have machinery for enabling us to take up anything that is considered desirable as an additional improvement. It takes time, of course, to make these investigations, but there is no reason why these investigations should not be in progress. Of course we have to make that work subordinate to the demands of other work.

Mr. HULBERT. Will it interfere detrimentally with the activity

of the men in your branch of the service?

Col. Newcomer. I think not. There is no limit of time involved here, because we can take them up as opportunity arises. We can go to the interested parties and find out what improvement is wanted, and that work, of course, is handled as we are able to handle it. As I have said, we make it subordinate to the other work.

Mr. HULBERT. You do not consider as especially urgent the au-

thorization of any of these surveys, do you?

Col. Newcomer. I do not know about these particular items. I do not know whether any of them are urgent or not. Some of them may be very urgent. To my mind it is desirable to have such an authorization as this. Of course, we do not know any particulars about their urgency, because we do not consider them until the law is passed.

Mr. HULBERT. Your theory is that it is better to have the authorization so that you can do the work if you should want to do it, because if you did not have the authorization, you would be precluded

from doing it?

Col. Newcomer. Yes, sir.

Mr. HULBERT. That is just the point I am making on the 40-foot channel through Hell Gate.

Mr. Dupré. It is discretionary?

Col. Newcomer. Yes, sir; as to the time and extent of the investigation.

Mr. Treadway. How many men do you imagine are employed on this survey work in your various offices throughout the country?

Col. NEWCOMER. I do not think that any additional men are employed as a rule. I know that there have been one or two items of investigation, particularly these investigations with reference to floods, that have required the employment of additional men, but almost invariably these items are handled by the regular employees in connection with other work as time permits.

Mr. Treadway. You say that your men will be called from your work owing to the military and naval emergency at the present time?

Col. NEWCOMER. Yes, sir; and that will probably delay somewhat

the action on these matters.

Mr. TREADWAY. So that this long list carried here in the bill more than likely would not be reached in the ordinary work of your force in the coming year?

Col. Newcomer. Of course you know that these are distributed

among the 54 different district officers.

Mr. Treadway. Of course, if your force is reduced, this is the

least important work to be done?

Col. Newcomer. It would be left, of course, until opportunity offered.

Mr. Gallagher. Do you mean that the men called away from the work would be the engineers?

Col. Newcomer. Yes, sir.

Mr. GALLAGHER. Would you lose any other men, or only engineers?

Col. Newcomer. Principally engineers, of course.

Mr. GALLAGHER. How many men do you employ permanently in river and harbor work in the different districts, have you any idea? Col. Newcomer. I really can not tell you that. I have seen state-

ments as to the number. There are a good many thousands.

Mr. GALLAGHER. They are not under civil service?

Col. Newcomer. Yes, sir; they are all under civil service except the day laborers. A great many of them are employed also, but all of our supervisory force, inspectors, foremen, and, in fact, nearly all the mechanics are under civil service. The skilled laborers are also under civil service. The men we used to call handy men are under civil service.

Mr. Gallagher. I understood you to say that your organization

would run up into the hundreds?

Col. Newcomer. It runs up into the thousands.

The CHAIRMAN. May I make this general statement about the surveys? These surveys, I think, are the surveys that were included in the last bill. Is that not correct, Mr. Brooker?

The CLERK. With a few amendments by the Senate.

The CHAIRMAN. With a few added by the Senate Committee on Commerce. These represent the wishes of various sections of the country. Some of them, I can guess in advance, will not be favorably considered, and probably the bulk of them will not be. A majority of them will not be favorably considered, but some of them are undoubtedly very important. Now, if we as a committee attempt to differentiate between them and say which are important and which are not, the sections affected by them would never agree with us. They would think that they had been unjustly treated or that they had been neglected, while, after an examination such as the engineers make and a printed report is submitted giving the reasons for their favorable or unfavorable recommendation, that will be accepted by them as a finality. The rejection of these surveys would bring disappointment to many sections and to the Representatives of those sections, as well as Senators, for that matter. We would be certainly following the path of least resistance, and we would be answering the demands of the various sections of the country and of the people who believe in their merit if we should include them. The people interested will never be convinced until these projects are examined in the ordinary way as required by law by the Corps of Engineers. Therefore I make the suggestion that we include these surveys just as they are. There is not one in my district that I know of.

Mr. Gallagher. In view of the statement of Col. Newcomer in reference to the policy to be pursued by the Engineer Corps with reference to these surveys, I would like to ask about the estimate of

\$200,000 appropriated here.

Col. Newcomer. I think you ought to appropriate at least that much if you want to provide for handling as many items as you have here.

Mr. Gallagher. Do you think it is necessary to make that appro-

priation of \$200,000?

Col. Newcomer. Yes, sir; I think so. This also includes contingencies for rivers and harbors for which there may be no special appropriation.

Mr. HULBERT. I want to ask Col. Newcomer if there have not been surveys authorized heretofore upon which the work has not been com-

pleted and upon which the reports have not yet been made?

Col. Newcomer. Yes, sir; there have been quite a number of surveys that were not completed. I have a table which is brought up to date showing that. We have recently passed on some that went back as far as the act of 1913. Nearly all of them, however, have been cleaned up, and we are down to the act of 1915.

Mr. HULBERT. About how many authorizations are there upon which reports have not yet been made? I mean authorizations for

examinations, etc.

Col. Newcomer. I think probably as many as 100. Mr. Treadway. In view of that statement—

Col. Newcomer (interposing). Of course that is the normal condition where you have an annual river and harbor bill. Where you have an annual bill, we have an overlapping of examinations and surveys.

Mr. HULBERT. Have you also completed the work directed in a previous bill with respect to an examination into the projects, a number of which were specifically enumerated, with regard to their

abandonment?

Col. Newcomer. We have not completed that yet. On page 41 of the report for 1915 you will find a table giving the work of the Board of Engineers on Rivers and Harbors. At that time there were 106 cases still outstanding. The number of investigations ordered has been 1,864, and of that number 1,587 had been completed in prior years and 171 last year, leaving 106 out of that total of 1,864. Now, of course, this table did not take into consideration the act approved July 7, 1916, which provides for a number of examinations. A number of those have already been completed, but the exact present status I do not know.

Mr. Treadway. Are there a good many that might be reported adversely and then again, within a year or two, the same project would be again included in the bill and a new survey asked for on account

of practically the same item?

Col. Newcomer. That is not a frequent occurrence, I should say. It has occurred in some instances, but, as I understand it, the committee has usually limited those renewals of examinations by fixing the condition that they shall not be reexamined until after the lapse

of a certain length of time.

The Charman. I will say that it has been the policy of the committee heretofore not to authorize any examination or survey of any improvement within four years of any past examination or survey, and only then if evidence was submitted that some changes had occurred. Of course that evidence frequently consists of the statements of Members of Congress, and is not official. In that connection I would like to read this statement from the last report of this committee; that is, the report on the last bill, that did not pass. This report was prepared by Mr. Sparkman, and I call your attention to this statement:

It is a matter worthy of note that the last two years of river and harbor legislation has shown a material decrease in the number of surveys ordered. While the bill for 1915, for instance, carried provision for 209 surveys, that of 1916 only provided for 128, while this bill only contains 55 such provisions. All this would indicate that the necessities for waterway improvements are rapidly decreasing.

That 55 was added to but slightly in the Senate.

Mr. Treadway. They added quite a good many on the floor of the House after this report was prepared.

The CHAIRMAN. Yes.

Mr. Frear. Perhaps all possible projects have been covered, and may not that be the reason for the reduction in the number?

The CHAIRMAN. That is the reason. As Mr. Sparkman said, the

demands for new surveys have been decreasing.

Mr. Treadway. Inasmuch as the chairman desires to avoid showing any partiality in the distribution of these surveys, and is therefore opposed to cutting any of them out, I think it would be perfectly proper, on the other hand, in view of the financial emergency of the country, and in view of the fact that assistance in the department is to be curtailed on account of other work, and in view of the further fact that there are probably at least 100 that have not been reported upon, to leave them all out of the bill. In that way we avoid showing any partiality whatever and avoid any trouble with members of Congress.

Mr. Dupré. Did not Col. Newcomer answer that by saying that some of these might be very important surveys? It is not within our power to go here and there and pick out one from another. We do not know the situation well enough to do that, and we would be here all summer if we undertook to analyze each one of them.

Mr. Treadway. They have been on hand for nearly a year, and they have not been sufficiently important for the department to think it worth while to even see whether any in the list were really important.

Mr. Dupré. I am talking about those in this contemplated bill. Mr. Treadway. So am I. We had this same list last spring.

Mr. Dupré. But the bill did not pass.

Mr. TREADWAY. It passed the House and it was in the hands of the board. It could have determined whether they were important or not.

Col. Newcomer. We have too much other work to permit that

before it is necessary.

Mr. TREADWAY. They were considered of secondary importance. Now, there never was a time when you were shorter of help for all the kinds of work that you need for this work than you will be in the coming year. I can not see any reason why they should not be excluded entirely from the bill.

Mr. Dupré. Mr. Treadway, did I get the impression from what you said just now that because the House passed this bill last year and the Senate failed to pass it that the Chief of Engineers is

vested with the right to go ahead and make these surveys?

Mr. Treadway. No, sir; not at all. Col. Newcomer stated that they did not look over the list and had no idea of the merits of any of them.

Mr. Dupré. But you never expected the engineers to determine

that

Mr. TREADWAY. I asked him about it, and he said they had not looked them over. Therefore, I think they can not be very pressing, and they can not expect to take up that work, because we are preparing this as an emergency bill.

Mr. HULBERT. Did they recommend them?

Mr. Treadway. They made the recommendations—

Mr. Dupré (interposing). How can they find out about the importance of these improvements until the surveys are made?

Mr. TREADWAY. Col. Newcomer, you said that this bill was prepared by the department, and, therefore, every item in it is a recom-

mendation from the department——

Col. Newcomer (interposing). I would like to qualify that, if that is your understanding of what I said. We only went into the items for which sums were appropriated for improvement or maintenance. We did not go into the surveys, and we did not go into these other general provisions here. We thought that there was probably no objection to them, and we did not have any objection to them at all. We simply accepted it as it was. What we have thought necessary to consider has been the question of the amounts to be expended for maintenance and improvements, and we really gave no consideration to these other things.

The CHAIRMAN. We will turn to section 5, following the surveys,

on page 35.

Col. Newcomer. May I suggest this: I want to call your attention to the fact that this sum appropriated in section 4 includes provision for a number of other things. For instance, \$50,000 of that goes toward the payment of a part of the office force in the office of the Chief of Engineers.

Mr. HULBERT. Does any part of this \$200,000 go toward the expense of making the examinations under section 14 of the act of

1915?

Col. Newcomer. The most of those examinations have been provided for from allotments made out of former appropriations. Of course if any of them should require further examination, and if there should be no appropriation for it, we would allot it from this fund.

Mr. HULBERT. In addition to the items specified in that act, the Chief of Engineers was directed to make a report upon any other projects, river or harbor, the further improvement of which under present conditions is undesirable or in which modifications of the plans or projects should be made.

Col. Newcomer. We have made a number of such reports.

Mr. Hulbert. Has a sufficient amount been appropriated to do what is contemplated in that provision of the law passed in the Sixty-third Congress?

Col. Newcomer. I think the funds would cover it.

The CHAIRMAN. Section 5 reads as follows:

Sec. 5. That the Secretary of War is hereby authorized and empowered to grant leases or licenses to municipal corporations and to public service or other corporations for the use of the surplus water not needed for purposes of navigation at the United States Government dams constructed at Lake Winnibigoshish and at Lake Pokegama, in the State of Minnesota, at such rates and compensation as he may deem just and reasonable, giving to municipal corporations the preference. That such leases or licenses shall not extend beyond the period of fifty years and that the moneys paid for the same shall go into the Treasury of the United States, to be used for the maintenance of the dams and the improvement of navigation in said river. The Secretary of War shall make such rules, regulations, and conditions as he may deem necessary to protect the interests of navigation and the United States, and the same shall be incorporated in the leases or licenses.

That latter place was not in the House bill, but was inserted in the Senate by Senator Nelson.

Col. Newcomer. I think that was the case.

Mr. HULBERT. Was that inserted because applications have been made for the use of such power?

Col. Newcomer. Yes, sir.

Mr. HULBERT. Have those applications come from municipal cor-

porations or private corporations?

Col. Newcomer. I am not familiar with the details, because that comes under Col. Keller in the chief's office, and inasmuch as the permits and leases are before him, I did not personally come in contact with it.

Mr. Hulbert. I was wondering what the effect would be of the

clause in line 1, page 36:

And to public service or other corporations for the use of the surplus water not needed for purposes of navigation at United States Government dams—

And so forth. Whether that would defeat the purpose that the author had in mind?

Col. Newcomer. I judge it might, at least.

Mr. Dupré. That is an isolated case?

Col. Newcomer. Yes, sir; there are a number of other cases where the Government has authorized the leasing of power.

Mr. Dupré. This is no general grant?

Col. Newcomer. No. sir.

Mr. Hulbert. This is to cover some specific case?

Col. Newcomer. Yes, sir.

The Chairman. And as I understand, it has the approval of the War Department if it has the approval of Congress?

Col. Newcomer. Yes, sir.

The CHAIRMAN. Section 6:

That no part of the funds herein appropriated shall be used to pay for any work done by private contract if the contract price is more than twenty-five per centum in excess of the estimated cost of doing the work by Government plant.

Mr. Hulbert. That is the reenactment of the Good amendment?

Col. Newcomer. Yes, sir; the same thing.

Mr. Switzer. I should like to ask Col. Newcomer whether he has noticed that that has brought about any material saving for the department?

Col. Newcomer. It certainly has not reduced prices, prices keep

Mr. SWITZER. And the cost has been more since the enactment than

Col. Newcomer. Yes, sir; I do not think it is because of the enactment of that section.

The CHAIRMAN. The next item is section 7:

That Bayou Meto in the State of Arkansas be, and the same is hereby declared to be, a nonnavigable stream, within the meaning of the Constitution and laws of the United States. The right of the Congress to alter, amend, or repeal this section is hereby expressly reserved.

That is the matter in which you are interested, Mr. Taylor.

was discussed before the committee.

Mr. Taylor. There has never been a boat on Bayou Meto since it has been a stream, but it has been suggested that such streams were quasi-navigable. The Government has never taken it over in any sense. There has been no appropriation for it at all. That stream floods thousands and thousands of acres of valuable land, just as rich as there is anywhere, and the property owners on both sides of the bayou want to put in some locks and dams so as to hold the water back and permit it to gradually drift into the Arkansas River, so that this great farming territory may be reclaimed and put into corn, rice, and other food products. It does not cost the Government anything. It is lying there. It is of no use as a stream for the Government, and never was. I suppose Col. Newcomer will substantiate the proposition that the only reason why it should be considered as in any way navigable is that when the water in a stream of this character gets held back it tends to retard the navigable streams and that then the Government might object to it. This stream does not and will not do that, because the Arkansas River has more water in it sometimes than we know what to do with.

The CHAIRMAN. That matter was considered by the committee

Mr. Taylor. Yes, sir; and incorporated in the last bill.

The Chairman. It was unanimously agreed to by the committee. The next is section 8:

That all of that portion of Ollala Slough in Lincoln County, Oregon, above a point where a line that is one hundred and twenty rods south and running east and west and parallel with the section line between sections eight and seventeen in township eleven south, range ten west of the Willamette meridian, crosses said stream, be, and is hereby, declared to be a nonnavigable stream.

Col. Newcomer. That section was introduced in the Senate. I remember it. It came before the department. The department has no objection. It is another case where they wish to enter upon a

reclamation project, which would be hampered if it were considered a navigable stream. There is no objection to it.

The CHAIRMAN. They wish it locally?

Col. Newcomer. Yes, sir.

The CHAIRMAN. The next is section 9:

That section four of the river and harbor act of August eighteenth, eighteen hundred and ninety-four, as amended by section eleven of the river and harbor act of June thirteenth, nineteen hundred and two, be, and is hereby, amended

so as to read as follows:

"Sec. 4. That it shall be the duty of the Secretary of War to prescribe such regulations for the use, administration, and navigation of the navigable waters of the United States as in his judgment the public necessity may require for the protection of life and property, or of operations of the United States in channel improvement, covering all matters not specifically delegated by law to some other executive department. Such regulations shall be posted, in conspicuous and appropriate places, for the information of the public; and every person and every corporation which shall violate such regulations shall be deemed guilty of a misdemeanor and, on conviction thereof in any district court of the United States within whose territorial jurisdiction such offense may have been committed, shall be punished by a fine not exceeding \$500, or by imprisonment (in the case of a natural person) not exceeding six months, in the discretion of the court."

Mr. Hulbert. As I understand, that was intended to authorize the department to protect the work that was going on at Coenties Reef,

East River?

Col. Newcomer. That was one instance. The other was the transportation of explosives in New York Harbor which caused so much trouble. This was approved by the committee before. This simply makes general the authority to prescribe regulations for all the navigable streams of the United States instead of canals and waters directly under improvement. We found that there was no delegated authority for control over all the navigable waters.

The CHAIRMAN. The next is section 10:

That an act entitled "An act authorizing the condemnation of lands or easements needed in connection with works of river and harbor improvement at the expense of persons, companies, or corporations," approved May sixteenth,

nineteen hundred and six, be amended so as to read as follows:

"That whenever any person, company, or corporation, municipal or private, or any State, or any reclamation, flood control or drainage district, or other public agency created by any State, shall undertake to secure any land or easement therein, needed in connection with a work of river and harbor improvement duly authorized by Congress, for the purpose of conveying the same to the United States free of cost, or for the purpose of conveying maintaining, and operating locks, dry docks, or other works to be conveyed to the United States free of cost, and of constructing, maintaining, and operating dams for use in connection therewith, and shall be unable for any reason to obtain the same by purchase and acquire a valid title thereto, the Secretary of War may, in his discretion, cause proceedings to be instituted in the name of the United States for the acquirement by condemnation of said land or easement; and it shall be the duty of the Attorney General of the United States to institute and conduct such proceedings upon the request of the Secretary of War: Provided, That all expenses of said proceedings and any award that may be made thereunder shall be paid by such person, company, or corporation, or State, or reclamation, flood control or drainage district, or other public agency as aforesaid, to secure which payment the Secretary of War may require such person, company, or corporation, or State, or reclamation, flood control or drainage district, or other public agency as aforesaid, to execute a proper bond in such amount as he may deem necessary before said proceedings are commenced.

Col. Newcomer. The purpose of this section is to give the same authority to use the Government's power of eminent domain in behalf

of reclamation, flood control, and drainage districts and of the States as was before given in the case of persons and corporations. We found ourselves faced with this situation in Sacramento Valley, Cal., that the State wanted to carry out a project contemplating work on this flood-control plan which has recently been adopted which required the securing of land in greater amount than would be needed for the Government project then in force; but as the State wanted to do it, we could not exercise the power of eminent domain in behalf of the State. If it had been a private person or corporation we could have done it.

The Chairman. We considered the language in this section very

carefully and made some changes, Mr. Dupré.

Mr. Dupré. Yes, sir. That is, in the interest of economy. The Chairman. The next is section 11:

That section four of the river and harbor act of July twenty-seventh, nineteen hundred and sixteen, be, and is hereby, amended so as to read as follows:

"Sec. 4. That there shall be printed one thousand five hundred copies of an index to the annual reports of the Chief. of Engineers, United States Army, from nineteen hundred and thirteen to nineteen hundred ad seventeen, inclusive, which shall be supplemental to the index published in House Document Numbered Seven hundred and forty, Sixty-third Congress, second session, covering the period from eighteen hundred and sixty-six to nineteen hundred and twelve, inclusive, authorized by section six of the river and harbor act approved July twenty-fifth, nineteen hundred and twelve, and shall also include an index of congressional documents relating to works of river and harbor improvement which have not been published in the annual reports of the Chief of Engineers, and an index of such other professional papers relating to the work of the Engineer Department as the Chief of Engineers may select for this purpose."

Col. Newcomer. Congress authorized a reprint of the annual report, which had been formerly authorized down to 1912, so as to bring it down to 1917. We found that it was going to be so very expensive to reprint the report, incorporating the additional data, that we thought a supplemental report covering the years down to 1917 would be much preferable. This was accepted by the committee before.

The Chairman. The next is section 12:

The Secretary of War is hereby directed to report without delay to this House the survey provided for by the river and harbor act of nineteen hundred and thirteen relative to the encroachments and obstructions in the Chicago River and all its branches, together with such encroachments as have been made in and along the lake front between Lincoln Park and the Indiana State line.

Was not that section insisted upon by Mr. Gallagher before?

Mr. Dupré. Yes, sir.

Mr. Kettner. And it was placed in the act before.

The CHAIRMAN. There is no special objection to it? Col. Newcomer. I do not see any objection to it.

The CHAIRMAN. The next is section 13:

That the Secretary of War is hereby authorized to permit the Betterton-Morgan Company (Incorporated) to construct a dock or docks upon lots one, four, and five, block six, Seattle tidelands, or upon such portions thereof as he may designate, the construction of said docks to be under the supervision of and all material used therein to be approved by the Secretary of War and the necessary expenses of such supervision and construction to be borne by said company. Said company shall maintain said docks at its own expense and use and maintain the same under such regulations as the Secretary of War may prescribe. Said company shall vacate said docks and remove all its property therefrom upon twenty-four hours' notice to do so from the Secretary of War, and it shall give the Secretary of War satisfactory assurances that upon thirty

days' notice to do so it will demolish said docks and remove all débris pertaining thereto as may be required by the Secretary of War. Said docks shall from the time of their construction be the property of the United States and subject to the use of the United States for any purpose whatsoever, and the only interest the said company shall have hereunder is a revocable license to use the same under the terms and conditions set out herein.

Col. Newcomer. That section was inserted in the Senate. I am not sufficiently informed as to the details of this matter. It is, again, one that comes under Col. Keller. I do not see any objection to giving the Secretary of War the authority. It appears to guard the interests of the Government adequately.

The CHAIRMAN. The interests of the Government will certainly be

protected?

Col. Newcomer. Yes, sir.

Mr. Kettner. We had a section in the last bill with regard to the Atchison, Topeka & Santa Fe Railroad covering a lease on a strip of land that is owned by the Government and running out into the bay at San Diego to which the department has no objection.

The CHAIRMAN. I recall that section now. That was stricken out

in the House on a point of order.

Mr. KETTNER. Yes, sir.

Col. Newcomer. As Mr. Kettner states, the department has no objection to that section.

Mr. Costello. It would be subject to the same treatment in the

House?

Mr. Kettner. It may be; I do not know.

The CHAIRMAN. It would be subject to a point of order, but the point might not be made.

Col. Newcomer. We did not include that section in the bill, simply

because we are basing our action on the Senate bill.

(Thereupon the committee adjourned, to meet to-morrow, Friday, May 4, 1917, at 10 o'clock a. m.)

Committee on Rivers and Harbors, House of Representatives, Washington, D. C., May 5, 1917.

The committee was called to order at 10.30 a.m., the chairman, Hon. John H. Small, presiding.

STATEMENT OF COL. HENRY C. NEWCOMER—Resumed.

The Chairman. I have a communication from Mr. McArthur this morning, in which he quotes a telegram received from the port of Newport commission, Newport, Oreg., as follows:

Special bond election for improving Yaquina Bay and Harbor carried with large majority. Our money is ready.

Commission, Port of Newport, Per O. F. Pacoson, *President*.

Mr. McArthur states further in his letter:

You will note that the port of Newport is ready with its money and I trust that Congress will make the necessary appropriation to begin the work of improving the harbor at that place.

We will take this project up first this morning with Col. New-comer.

Col. Newcomer. That action is obviously in response to the report on the further improvement of Yaquina Bar, Bay, and Harbor, Oreg., which was sent to Congress a few days ago, and which is not in print as yet, except in proof sheets. It will be some time before the document and maps will be available for examination. A number of years ago, and previous to 1905, jetties were constructed to improve the bar entrance at Yaquina Bay. Recently there has been an increased activity in the lumber situation tributary to Yaquina Bay occasioned partly by the opening up of an Indian reservation which had been closed for a long time, and the locality now is very desirous of getting an additional improvement across the bar and in the bay. The jetties have produced a channel over the bar 15 feet in depth, and there is a shoal about 2,000 feet inside the jetties over which there is a depth of 17 feet. The report submitted (H. Doc. No. 109, 65th Cong., 1st sess.), recommends the extension of the jetties and some dredging and rock removal to give a depth of 20 feet

through the entrance and 18 feet inside.

The total cost of the extension of the jetties and the work inside amounts to about \$836,000, and the proposition is, as recommended by the department, that that be done on a 50 per cent basis of cooperation, and it appears that the port has now provided the money. I have not, of course, discussed this matter with the Chief of Engineers, as it has been presented to me since my arrival here. I question whether it is of the character that would justify special consideration at this time. We think it is a desirable piece of work. The past tonnage has been very small. I do not think it has been over 20,000 or 25,000 tons a year. It looks now as though they are taking hold of this lumber proposition on a larger scale. This is evidenced by their willingness to contribute so much money. There is some rock on the bar that will have to be removed. I question, Mr. Chairman, whether it is of the emergency character which will justify taking it up in this exceptional way before the document is printed. I do not recall anything particularly urgent in regard to it except to get out boats on a larger draft. Out there now they can probably get boats out drawing 17 to 20 feet at high water. If they can get out a draft of 24 feet at high water they can get out the larger draft lumber boats in the trade on the coast. It is a project which we favor, but hardly regard it as of an emergency character. It is one that will undoubtedly be approved by Congress at some time in the future. Of course, if Congress sees fit to go on and adopt projects of that cless now, why, then, we will be very glad to consider them, but I do not see that we have any special ground on which to urge them.

Mr. Costello. The tendency is to keep the amount of this bill down. Now, is there another item in that particular locality that

money could be taken from and transferred to this?

Col. Newcomer. No, sir. We have taken something off of Columbia River at the mouth. We have a sufficient balance on hand there for the dredging required at the mouth. This bill has come up so far with every item considered by the Chief of Engineers, and I believe you would have it that way—that every item adopted has been considered by the Chief of Engineers. This matter has not yet been brought to his attention. I am merely giving you my own personal

views, and whether he would agree I can not say. As a rule, our views have been in accordance, and there is an apparent opportunity to

take it up in the regular way.

The CHAIRMAN. If we were starting a bill in the regular way, as we hope we will at the next regular session, then, judging from these preliminary statements by Col. Newcomer and just a casual glance at the report of the Chief of Engineers, it looks prima facie that it will be included at that time.

Mr. Kettner. I would like to say to my colleague that we could not very well press the adoption of this project and leave out Crescent City, because that project should be adopted, in my opinion, before

this, or at least at the same time.

Col. Newcomer. Of course, Yaquina Bay has now sufficient water for the lighter-draft coastwise boats. It is a question of giving

them a deeper draft.

The Chairman. Colonel, while we are on the Pacific coast—Capt. Osborne has asked the question several times; for his information—about how will you spend this appropriation on the Columbia River and the lower Willamette.

Capt. Osborne. I think I understand that there is money enough there to keep up the dredging at the mouth of the river. That is all

I wanted to know.

Col. Newcomer. \$310,000 is the estimate for the work inside of the mouth, from the estuary up to Portland. We have on hand sufficient for dredging at the mouth. On March 1 there was a balance of \$304,000 on hand.

Mr. Treadway. Have you seen Gen. Black, Colonel, within the last hour—after I was there. I have had a talk with him in regard to

Portland and Boston Harbors.

Col. Newcomer. Yes; I know what he said about Portland Har-

bor. He did not say anything about Boston Harbor.

Mr. Treadway. He authorized me to say to the committee that so far as the adoption of the project was concerned it was perfectly agreeable to him to have it go in, provided it did not carry the appropriation it carried in the last bill. He would be very glad to have it carried in the same way the Mobile project was adopted without carrying the amount of money. Also, since you have seen

him, Senator Hale was there.

Col. Newcomer. I spoke to him yesterday about Boston Harbor, and at that time he expressed the view, confirming his former action, that he had not seen in that case anything that would justify him in recommending it as a proposition for military preparedness. was in a great rush this morning; and he probably neglected, for that reason, to tell me about Boston Harbor after seeing you. About Portland Harbor, in that case he does not see any reason why it should be included in this bill; but thought if the Canadian Government should ask that it be included as a military measure he would be very glad to recommend it simply on their opinion that it was needed. The main use that is expected for this increase in depth is the shipment of grain that is diverted from Montreal and other Canadian ports during the winter weather, when they are They have made, of course, in Canada, very great stopped by ice. expenditures for the purpose of accommodating this grain traffic

wholly within their boundaries, so we do not understand that they favor the diversion of that traffic to Portland. But, in view of the existing conditions it is possible that they may consider it a matter of military value in the shipping of grain to Europe to have this done at this time, so we are awaiting the result of the conference with the officials of the Canadian Government. I understand the matter is being taken up to-day with the British ambassador, and we will get their views next week, so that there is no definite proposition yet for his conclusion. I might state in that connection as bearing upon the present urgency that there is a 9-foot tide at Portland, and the project depth is 30 feet, so there is no question of any boats being able to get in and out on the tide, and if the additional depth is provided at the dock so that a boat can lie at the dock and load during the low tide it is a question of simply waiting a few hours to get out on the tide. The lack of depth at the dock is one difficulty A boat drawing 34 feet simply could not load there. are now deepening the space at the dock to 33 feet at low water.

Mr. TREADWAY. I think, Mr. Chairman, it would not be out of place to know of the interview this morning between Senator Hale and Gen. Black. Senator Hale was accompanied by one of the attachés of the British Embassy. The entire matter seemed to hinge, in the opinion of Gen. Black, on the fact whether or not traffic would be diverted from the choked ports of Canada. The Grand Trunk Railway has good equipment at Portland, but it is practically unused as long as traffic is open in Canadian ports. The Grand Trunk, which is under the authority of the Canadian Government, does not use its facilities at Portland during the period when the Canadian ports are available—not closed to the ice of winter. Gen. Black desired an assurance from the representatives of the British Government that this diversion of traffic would not take place to the detriment of the use of Portland, provided this work was undertaken. He was anxious that I should know of the situation, and the representative of the British Embassy left at once to see the British ambassador, so that it seems to me that the matter is in abeyance until further word comes from Gen. Black as to his conclusions from any further representations that are made by the embassy.

The CHAIRMAN. Mr. Treadway, before leaving, and with reference to what you said about Boston Harbor: Boston Harbor is not mentioned among these recommendations we have in printed form, so that if nothing is included for Boston for maintenance we would have nothing to which to attach this item for the new project.

Mr. TREADWAY. Should there not be an item for maintenance in-

cluded for Boston Harbor?

Col. Newcomer. No, sir. They have sufficient funds on hand. I had not thought to put that in with these minor items on account of

its much greater importance.

Mr. Treadway. Of course, I should like to see the item carried as it was in the last bill; but realizing that that is not possible under existing conditions, the next best thing is to accept the suggestion that Gen. Black makes—to let it go in as a project approved without appropriating any funds.

Col. Newcomer. Of course, that could be done, as has been sug-

Col. Newcomer. Of course, that could be done, as has been suggested in another case, simply adopt the Boston project and pro-

vide that any funds available may be used toward the prosecution of the new project.

Mr. Treadway. How much is the balance on hand there?

Col. Newcomer. Something like \$85,000 to \$88,000 available. Boston Harbor is divided into several item. The balance available on the 1st of March, leaving out Chelsea Creek, would be about \$85,000. Including Chelsea Creek, it would be \$135,000. An item similar to the one inserted in the bill for Black Rock Harbor could be used for Boston Harbor. It reads like this:

The unexpended balances of appropriations heretofore made and authorized for the improvement of this harbor are hereby made available for maintenance and improvement in accordance with the report.

And so forth.

We might dispose of the matter in that way. I will take this matter up with the Chief of Engineers this afternoon and get his approval of that item, and then I can telephone down to Mr. Brooker, and, if it meets the approval of the committee, it can be inserted in that form.

Mr. Switzer. I move that the provision for Boston Harbor, as approved by the Chief of Engineers, be inserted in the bill.

Seconded by Mr. Kettner and carried unanimously.

The CHAIRMAN. With that authority, then, if we get the final approval of the Chief of Engineers, we will include it in the appropriate language.

Mr. Costello. What was the decision in regard to Portland?

The CHAIRMAN. The decision as to Portland Harbor is in abeyance, awaiting the report of the British Government—rather, the Canadian Government—as to the probable use of that port for the deeper draft if it should be approved, and then it is to be inserted in the bill if the Chief of Engineers approves.

Mr. Treadway. I move that we authorize the chairman to insert the project for Portland Harbor, as it is understood by the com-

mittee.

The CHAIRMAN. Is it also your pleasure that, if that recommendation does not come in time before the bill is reported, that it

shall be offered on the floor?

Mr. Treadway. I suggested that to Senator Hale, and I suggested that there was no occasion for delay on that account, because a committee amendment would be accepted by the House without objection. I include that in the motion.

Mr. Kettner. I second the motion.

The CHAIRMAN. Then the motion is that, if the improvement of Portland Harbor shall be recommended by the Chief of Engineers, that it shall be included in the bill if that recommendation is received before the reporting of the bill, and if not it is to be offered on the floor of the House, carrying such amount as may be recommended by the Chief of Engineers.

The motion was put to a vote and carried unanimously.

The CHAIRMAN. The next item is the one for East River and Hell Gate.

Col. Newcomer. In the first place, with reference to a 40-foot channel between East River and Hell Gate, the Chief of Engineers is of the opinion that a 40-foot channel there will probably not be

required for a number of years to come, and he did not see his way clear to recommending it unless it should receive the approval of the Navy. If they should now request it, he, of course, might recommend it, on the basis of their views about it. They have so far only recommended the 40-foot channel through Diamond Reef and 35 through Hell Gate, stating, however, that ultimately they would like to have 40 feet through Hell Gate. We have had no indication that they want it now. I understand Mr. Hulbert is taking that proposition up with a view of getting some approval from the Navy Department. If it should be recommended by the Navy Department, I do not think the Chief of Engineers will offer any objection to that at all, because we are acting on that matter purely on the expression of the Naval Board as to what their needs are.

Coming to New York Harbor proper Gen. Black said, as a result of the conference with Mr. Hulbert, that he was heartily in favor of authorizing the projects for widening the channel opposite the anchorage ground in the upper bay and for the removal of Craven Shoal, provided no additional sum of money be appropriated for that purpose. In other words, he thinks that that work should be proceeded with as soon as we can get on a normal basis, and for that reason he has approved a form of amendment to the bill, on page 3,

which is as follows:

New York Harbor, New York: For maintenance of entrance channels and for the improvement of the upper bay opposite anchorage grounds in accordance with the report submitted in House Document Numbered Five hundred and eighteen, Sixty-third Congress, second session, and at Craven Shoal in accordance with the report submitted in House Document Numbered Five hundred and fifty-seven, Sixty-fourth Congress, first session, \$40,000; and the unexpended balances of appropriations heretofore made and authorized for the improvement of the entrance channels are hereby made available for improvement in accordance with the reports submitted in said documents.

Forty thousand dollars is the same amount recommended before. This language takes the place of lines 15 and 16 in the last committee print. Then it would proceed as in the bill. Now, the reason for using the expression "entrance channels" instead of Ambrose Channel is to get that on a little better status. The project provides for two channels and there is no particular reason apparently why they should name one and not the other, because the project provides for the maintenance of both. The reason for making available the unexpended balance of appropriations is this: That we have \$150,000 of the balances remaining there which to some extent, possibly, might be used on these projects. The Craven Shoal project is a small item. It is a shoal that is really in line with the Ambrose Channel extended. In order to continue it up the bay and to get a clear unobstructed channel without changing the course that improvement should be made.

Mr. Costello. Now, by adopting these two projects what amount of money do we commit the Government to in the way of future ex-

penditures?

Col. Newcomer. Cravel Shoal is a small project. That improvement is to cost \$30,000, and the former bill provided \$200,000 on the other project. Its total cost is \$830,000. That will be \$860,000 in all.

Mr. Costello. Practically a million dollars, and we are committing the Government to that, so that we have given practically \$200,000

in this bill directed to these improvements with a consequential improvement of nearly a million.

Col. Newcomer. Practically that.

Mr. Costello. I just wanted to call attention to this fact, that it is

not a recommended project.

Col. Newcomer. Now, with reference to the Bay Ridge and Red Hook Channels, which were also taken up with the Chief of Engineers by Mr. Hulbert. The Chief of Engineers did not see his way clear to make any changes there. In other words, he did not think it should be included.

The CHAIRMAN. You have embraced all the matters relative to New York Harbor which were rereferred to the Chief of Engineers.

That brings us now to the rereference of Buffalo Harbor.

Mr. Treadway. Before you leave New York. May I ask if it is understood that this is agreeable to our colleague, Mr. Hulbert?

The CHAIRMAN. I am sure the present recommendation against 40 feet at Hell Gate is not agreeable to him. These others, of course,

will be.

Col. Newcomer. I understood he is willing to accept the decision of the Chief of Engineers on all these items except Hell Gate. He did say he was going to see if he could not get the recommendation of the Navy Department for that project.

The CHAIRMAN. Now we will go to the reference at the request of Mr. Dempsey, that Buffalo Harbor, Port Chester Harbor, and

Ogdensburg Harbor be reconsidered.

Col. Newcomer. The Chief of Engineers spoke to me about those projects last evening. He did not go into the details as to what presentation was made to him. His conclusions were that nothing further should be included in the bill for either one of those items.

Mr. Dempsey. Colonel, Ogdensburg has a commerce with the St.

Lawrence River, has it not? ... Col. Newcomer. Yes. sir.

Mr. Dempsey. And that really is the largest commerce carrying

river in the United States?

Col. Newcomer. No, sir. It surely can not be as large as the St. Marys, or the Detroit, or the Hudson. That is news to me. As a matter of fact the commerce of Ogdensburg is mainly a ferry commerce. But there is, also, a commerce along the river of a considerable amount.

Mr. Dempsey. Here is what I have in mind. Would there be any chance of this being put on the same basis with Portland—of a conference with officials of the Canadian Government to see if this improvement could not be made of use in handling grain and other

materials for export?

Col. Newcomer. I think the Chief of Engineers would be glad to carry out the wishes of the Canadian Government. I have not spoken to him about the matter. As I understand the proposition there the greater urgency is on account of the ferry passenger traffic. They do have a very difficult situation there in the winter frequently, when the ice remains in the harbor and they have to land passengers on the ice to walk ashore. It is a desirable item in that way, but we did not consider it of special urgency.

Mr. Costello. Can not we put this in the same position as a mat-

ter to be referred to the British Government?

Col. Newcomer. I think if the matter is referred back it should be taken up by some other party with the British Government. I do not understand that Gen. Black has taken any of these matters up with the Canadian Government officials.

Mr. Costello. Then you are putting the parties interested in the position of taking improvements up with the British Government

instead of taking it up with our Government.

Col. Newcomer. Well, the point is this, that if the matter is taken up directly you will get quicker action. I do not know how this other matter was handled. I know there was a conference in the Chief of Engineer's office, at which a member of the British Embassy was present. If the Chief of Engineers takes it up, he has to take it up with the Secretary of War, and the Secretary of War takes it up with the Secretary of State, and so on, which consumes a great deal of time. It seems as if the parties interested here could get at it more directly.

The CHAIRMAN. Just as the Portland matter was taken up.

Col. Newcomer. The point is this also: It is not on account of any disinclination on our part. This is a very time-consuming process.

The CHAIRMAN. There is \$220,000 on hand for Buffalo Harbor, and that is the reason no estimate is made for this bill. The Chief of Engineers regarded that as sufficient.

Now, we will go to the rereference to the Chief of Engineers asked for by Capt. Osborne relative to Skagit River and the group item

for San Diago, Los Angeles, and San Luis Obispo Harbors.

Col. NEWCOMER. Regarding Skagit River, Wash., he did not see that there was any special urgency in that case. The situation is this: The improvement proposed in the document that was included in the last bill, which failed, was only for the improvement of Skagit City Bar. There is a wide place in the river where, after freshets, the depth is reduced to as little at 3 feet, and in order to get over that bar the steamboats have to wait for the tide, and sometimes they have to wait for the higher tide, which occurs only once in 24 hours. Then, as time passes, that bar improves somewhat. Further improvements is recommended by dredging and training dikes so as to give passage at all stages of the tide. The report on the project states that during most of the months when the movement of crops is taking place the stage of the river is sufficient to allow the boats to go over the bar at those times. But there are times when the boats are delayed.

I would like, however, to make this statement: You will understand, of course, that the Chief of Engineers has been tremendously busy lately, and the consideration that he has been able to give these projects has not been as elaborate as we would wish to give to them. Our considerations are based on the consideration we have been able

to give them.

With reference to the group item including San Diego, Los Angeles, and San Luis Obispo Harbors we see no objection, if you desire to separate them. Care should be taken to include the additional work at San Diego which has been introduced at this time.

Mr. Kettner. That is satisfactory to me.

Col. Newcomer. We do not see any objection, except that we prefer in general to observe the grouping principle.

The Chairman. I would say to the committee that I am in favor of this grouping plan and think it preserves the functions of the committee, and at the same time gives that latitude of administration by the War Department which makes for the best results of appropriations for maintenance. This is the only grouping in the bill about which, to my mind, there seemed to be any reasonable doubt. San Diego is a very important harbor. It is the only natural harbor between San Francisco and the southern limits of California, if my recollection is correct. Los Angeles is a very important harbor, but to a large extent artificial. San Luis Obispo is not as important as the other two. The local reasons would seem to indicate the wisdom of a separation there, so what is the pleasure of the committee now about that separation?

(Mr. Osborne moved that the items be separated. Seconded by

Mr. Switzer and Mr. Costello. Carried unanimously.)

Col. Newcomer. Of course, San Luis Obispo would be dropped out,

as there is no appropriation asked for it.

The CHAIRMAN. Judge Booher is not here this morning, and in order that he may not feel neglected we will give him every courtesy

in his absence.

As you will remember, Judge Booher, in regard to the item authorizing the Secretary of War to permit the Betterton-Morgan Co. to construct docks upon lots 1, 4, and 5, block 6, Seattle tide lands. He thought the provision was too restrictive on the Betterton-Morgan Co., to which the franchise was to be granted, in that it requires the said company to vacate said docks and remove all its property therefrom upon 24 hours' notice to do so from the Secretary of War, and

out of courtesy to him that matter was also referred.

Col. Newcomer. The situation about that is this: This paragraph, or section, was introduced by Senator Jones, or by the Senate Committee on Commerce on his request, and it was understood to be approved by the corporation. The improvement has been under discussion for some time with the War Department, and I have consulted with the Chief of Engineers and Col. Keeler, who has been handling this particular case. It appears that there is no objection on the ground of navigation to this being done. The matter, however, has been referred to the district officer for report in view of certain

features that have developed.

There is some doubt as to whether the Government owns the land, as there is some question whether the conditions attached to the grant of title from the State have all been satisfied; so in case the Government has no title I suppose it would go back to the State. But if the Government's title is found to be good, this question has arisen: If this corporation wishes to make use of the land of the Government there ought to be some payment to the Government, either in the form of a rental, or we might sell it. Apparently there is no use that the Government will make of this land. This property abuts on upland that is owned by this corporation. If the title is in the Government it is proposed to ask the district officer to report upon the best procedure—whether to sell it or lease it, and upon what terms. I notice that this item does not make a provision for payment of anything to the Government. That is the only thing that occurs to the Chief of Engineers in regard to it. We

are not opposed to it. We think that the Government should be pro-

tected, that is all.

The CHAIRMAN. If I might make this suggestion without attempting to minimize the force of what Col. Newcomer says: As this was offered in the Senate and would probably be insisted upon again, and if insisted upon would receive the approval of the Senate Committee on Commerce, and make an amendment making it necessary to send the bill to conference, and that as the Government is fully protected here, would it not be well to let that remain in the bill, and if, before the bill comes up in the House, the Chief of Engineers receives any report from the district officer making an amendment necessary we can amend it on the floor.

Mr. Kettner. I move that such a course be taken.

Mr. Switzer. I second the motion.

The CHAIRMAN. Without objection, then, that will be taken as

the action of the committee.

Mr. Dempsey. Should there be a new survey for Buffalo Harbor! I guess, in view of the recent report on that harbor, that is not necessary. Was not that provided for in the last bill! What they want is a survey for widening the entrance channel.

Col. Newcomer. We have made a report on the widening of that entrance, and that matter can be handled by a committee resolution calling for a review of that report, which would accomplish a further

study of that matter.

The CHAIRMAN. Then we will take it up, Mr. Dempsey, and study

it at some future time.

Col. Newcomer. About Mobile Harbor, the thought occurred to me afterwards that this wording is not just as it should be. I would suggest a slight change in the wording on page 14, line 5. That was changed to read: "For maintenance of channel connecting Mobile Bay and Mississippi Sound, \$5,000; for improvement and maintenance of Mobile Harbor and bar in accordance with the report submitted in House Document Numbered Seventeen hundred and sixty-three, Sixty-fourth Congress, second session, and subject to the conditions set forth in said document." Now, I would like to substitute the following: "For maintenance of Mobile Harbor and bar and for improvement in accordance with the report, and so forth, \$110,000," which makes money available for maintenance without being subject to any conditions. The improvement work only should be subject to the conditions.

(Mr. Dempsey moved that the change as suggested be made. Mr.

Kettner seconded the motion. Adopted unanimously.)

The CHAIRMAN. Mr. Lever, of South Carolina, came in this morning and said he could not remain because his Committee on Agriculture meets the same time. He desired me to bring to the attention of Col. Newcomer the new improvement on the Congaree River, which was included in the last bill and carried an appropriation of \$100,000. The Congaree River comes up to Columbia, S. C. A line of steamboats has been operating on that river for some years, and it is very important to Columbia that this line of boats be continued. I happen to know about the local situation. On account of the regulation of rail rates as well as the prorating between railroads and the boats it is necessary to keep this line of boats running and he desired me to bring the matter before the committee and also

to the attention of Col. Newcomer to ascertain if, under the circumstances, that improvement was such an emergency as ought to be included in the bill.

Col. Newcomer. One hundred thousand is the amount involved.

Mr. Costello. That is the river about which there was so much

controversy in the last session, is it not?

The CHAIRMAN. I think you are thinking of the group farther south, the Altamaha, Oconee, and Ocmulgee Rivers, Ga.

Mr. Costello. There is a railroad terminal at Columbia, is there

not?

The Chairman. Yes. It is quite a railroad point. The title of this group is Santee, Wateree, and Congaree Rivers, and there is \$30,000 appropriated in this bill for maintenance, and the last bill carried this additional provision: "For improvement of Congaree River in accordance with the report submitted in House Document Numbered seven hundred and two, Sixty-third Congress, second session, \$50,000."

Mr. Costello. Is not that the river that our friend Mr. Frear so

strongly opposed?

The CHAIRMAN. I do not think so.

Col. Newcomer. I will look it over and speak to the Chief of Engineers in regard to the matter and report his decision to the committee.

The CHAIRMAN. Now, before you leave, what is the pleasure of the committee if the Chief of Engineers recommends the inclusion

of this item.

Mr. Costello. We are framing this bill on his recommendations and if the necessity existed before and they can see it again, for my part I am perfectly satisfied. Our argument before the House and Senate is that this bill has the approval of the President and the War Department and that is why we are urging the passage of the bill.

The CHAIRMAN. Well, is it the pleasure of the committee that if the Chief of Engineers recommands this improvement that we shall include it. Mr. Lever himself is a very intelligent and most reasonable man. He said to me that if the Chief of Engineers could not recommend it he was for the bill.

(Mr. Switzer moved that if the Chief of Engineers recommends its inclusion it be included. Mr. Kettner seconded the motion.

Unanimously adopted.)

The Chairman. In the report of Col. Newcomer in regard to matters about New York Harbor, everything seems to be finally settled except the matter of 40 feet at Hell Gate. Col. Newcomer has just this morning stated that, with the information before the chief at this time, he does not feel free to recommend that authorization for 40 feet, but he added that if the Navy Department expresses a desire that this improvement be made as an improvement necessary for the Navy that the chief would regard their recommendation as controlling the matter on the ground of military necessity.

Mr. Dempsey. I move that if for any cause the Chief of Engineers recommends that the improvement of Hell Gate should be made to 40 feet, upon the advice of the Navy Department, that the appro-

priate change be made in the bill.

Mr. Dupré. I move that Mr. Dempsey's motion be laid on the table.

Mr. Switzer. How much does that commit us to.

Mr. Costello. I think, with this last addition to New York Harbor, involving about a million, and there is another appropriation that was increased in this bill, so that there is practically \$1,300,000 of an increase in these items outside of amounts that were agreed on in the previous bill that was lost in the Senate.

Mr. Kettner. The total cost of the channel increased from 35 to 40

feet across Diamond Reef is \$3,300,000.

Col. Newcomer. I may have expressed the matter too strongly in saying that the Chief of Engineers would approve the request of the Navy Department.

Mr. Kettner. Last evening I made a motion to authorize the chairman to introduce the bill. I renew that motion.

Mr. Dempsey. I withdraw my motion.

The CHAIRMAN. All of us want to show the utmost courtesy to every member of the committee. Certainly, the chairman does and will. I think our good brother Hulbert has been a little too insistent in going over the head of the Secretary of War to get the Navy Department to agree to something that they have not heretofore agreed to, but if he should come with evidence that the Navy Department does not wish this, then we can do nothing else except to ask the Chief of Engineers to consider it and make us a later report, and then it will be necessary to call the committee together and see what they will do.

Mr. Dempsey. Mr. Powers, of Kentucky, asked me if the committee had considered and allowed an appropriation for the upper Cum-

berland above Nashville.

The Chairman. I will just say this: We have included in this bill \$632,000 for improvement below Nashville, the same amount as in the last bill. Above Nashville there is in this bill \$5,000 for maintenance, but the last bill appropriated \$200,000, as it passed the House, for the section above Nashville, which is not included in this bill.

Mr. Dempsey. Of course, I am not at all familiar with the conditions there. I understand he wants that project started and some locks and dame constructed, which have been omitted and leave a gap

in the improvement.

Col. Newcomer. We gave that project consideration, but we did

not think it desirable to do that at this session.

The Chairman. Now, gentlemen, the motion of Mr. Kettner is that the chairman be authorized to report the bill as adopted by the committee and to use every effort to obtain its consideration in the

(Seconded by Mr. Switzer and carried unanimously.)

INDEX.

A.

	91
Absecon Creek, N. J.	31
Agate Bay Harbor, Minn	92
Alabama River, Ala	76
Algoma Harbor, Wis	94
Alloway Creek, N. J	33
Alpena Harbor, Mich	93
Altamaha River, Ga	62
Amite River, La	83
Anacostia River, D. C	52
Anahuac Channel, Tex	86
Anclote River, Fla	70
Apalachicola River, Fla.:	
Channel through St. Georges Sound to Gulf of Mexico	71
Channel to St. Andrews Bay	71
Appointtox River, Va	54
Annoquinimink River Del	36
Appoquinimink River, DelAquia Creek, Va	52
Aransas Bay and Pass, Tex	86
Arcadia Harbor, Mich	93
	88
Arkansas River, Ark	97
Ashland Harbor, Wis	
Ashley River, S. C.	60
Ashtabula Harbor, Ohio	89
Atchafalaya River, La., improvement from Morgan City to the Gulf of	~~
Mexico	85
B.	
D.	
	46
Baltimore, Md	46
Baltimore, Md	87
Baltimore, Md	87 86
Baltimore, Md_ Bartholomew Bayou, La., and Ark Bastrop Bayou, Tex Bay River, N. C	87 86 57
Baltimore, Md	87 86
Baltimore, Md	87 86 57 80
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound	87 86 57 80
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex Bay River, N. C_ Bear Creek, Miss Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_	87 86 57 80 57 57
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex Bay River, N. C_ Bear Creek, Miss Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_	87 86 57 80 57 57 57
Baltimore, Md_ Bartholomew Bayou, La., and Ark	87 86 57 80 57 57 57 55
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex Bay River, N. C- Bear Creek, Miss Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Panlico Sound_	87 86 57 80 57 57 57 55 57
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Pamlico Sound_ Beaufort, S. C., waterway to Sayannah, Ga_	87 86 57 80 57 57 57 55 57 61
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex Bay River, N. C- Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C	87 86 57 80 57 57 57 55 57 61 102
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex_ Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Panilico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass	87 86 57 80 57 57 57 55 57 61
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex Bay River, N. C_ Bear Creek, Miss Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Pamlico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass_ Big Sunflower River, Miss_	87 86 57 80 57 57 57 55 57 61 102
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex_ Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Panilico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass	87 86 57 80 57 57 57 55 57 61 102 20
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex_ Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Pamlico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass_ Big Sunflower River, Miss_ Big Thoroughfare River, Md_ Biloxi Harbor, Miss_	87 86 57 80 57 57 55 57 61 102 20 80
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex_ Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Pamlico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass_ Big Sunflower River, Miss Big Thoroughfare River, Md_	87 86 57 80 57 57 57 55 57 61 102 20 80 46
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex_ Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Panilico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass_ Big Sunflower River, Miss_ Big Thoroughfare River, Md_ Biloxi Harbor, Miss_ Biscayne Bay, Fla_ Black River, La	87 86 57 80 57 57 57 55 57 61 102 20 80 46 80
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex_ Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Pamlico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass_ Big Sunflower River, Miss_ Big Thoroughfare River, Md_ Biloxi Harbor, Miss_ Biscayne Bay, Fla_ Black River, La_ Black River, Mich_	87 86 57 80 57 57 57 55 57 61 102 20 80 46 80 67
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex_ Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Pamlico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass_ Big Sunflower River, Miss_ Big Thoroughfare River, Md_ Biloxi Harbor, Miss_ Biscayne Bay, Fla_ Black River, La_ Black River, Mich_	\$7 \$6 57 80 57 57 55 57 61 102 20 80 46 80 67 87
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Pamlico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass_ Big Sunflower River, Miss_ Big Thoroughfare River, Md_ Biloxi Harbor, Miss_ Biscayne Bay, Fla_ Black River, La_ Black River, Mich_ Black River, Mich_ Black Rock Harbor, N. Y_	\$7 86 57 80 57 57 55 57 61 102 20 80 46 80 67 87 93
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex_ Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Pamlico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass_ Big Sunflower River, Miss_ Big Sunflower River, Miss_ Big Thoroughfare River, Md_ Biloxi Harbor, Miss_ Biscayne Bay, Fla_ Black River, La_ Black River, La_ Black River, Mich_ Bllack Rock Harbor, N. Y. Blackwater River, Fla_	\$7 \$6 57 80 57 57 55 57 61 102 20 80 46 80 67 87 87 87 87 87 87 87 87 87 8
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex Bay River, N. C- Bear Creek, Miss Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River Beaufort Inlet, N. C	87 86 57 80 57 57 57 57 61 102 20 80 46 80 67 87 93 25 71 55
Baltimore, Md_ Bartholomew Bayou, La., and Ark_ Bastrop Bayou, Tex_ Bay River, N. C_ Bear Creek, Miss_ Beaufort Harbor and River, N. C.: Improvement of waterway to Core Sound_ Improvement of waterway to New River_ Beaufort Inlet, N. C_ Waterway to Norfolk, Va_ Waterway to Pamlico Sound_ Beaufort, S. C., waterway to Savannah, Ga_ Bellingham Bay and Harbor, Wash_ Beverly Harbor, Mass_ Big Sunflower River, Miss_ Big Sunflower River, Miss_ Big Thoroughfare River, Md_ Biloxi Harbor, Miss_ Biscayne Bay, Fla_ Black River, La_ Black River, La_ Black River, Mich_ Bllack Rock Harbor, N. Y. Blackwater River, Fla_	\$7 \$6 57 80 57 57 55 57 61 102 20 80 46 80 67 87 93 25 71

Boeuf Bayou, La	Page.
Bogue Falia, La	87 83
Boston, Mass1	6 20 151
Branford Harbor, Conn	91
Brazos River, Tex	5
Improvement of mouth	5_87
Bridgeport Harbor, Conn	21
Broad Creek, Md	46
Broad Creek River, Del	55
Broadkill River, DelBronx River, N. Y	36
Brunswick Harbor, Ga	23
Buffalo Harbor, N. Y	155
Improvement of channels in waters connecting Great Lakes	93
Burlington Harbor, Vt	22
(
· C.	
Calcasieu Pass and River, La	84
Caloosahatchee River, Fla	70
Calumet Harbor and River, Ill. and Ind	94
Cambridge Harbor, Md	46
Cape Fear River, N. C	59 59
Cape Vincent Harbor, N. Y	39 22
Carrabelle Harbor and River, Fla	71
Cascades Canal, Columbia River, Oreg	101
Cedar Bayou, Tex	86
Charleston Harbor, S. C.	60
Charlevoix Harbor, Mich	93
Charlotte Harbor, Fla	70
Charlotte Harbor, N. Y	22
Chattahoochee River, Ga. and AlaCheboygan Harbor, Mich	71 93
Cheesequake Creek, N. J.	/ 31
Chefuncte River, La	83
Chehalis River, Wash	101
Chehalis River, WashChesapeake Bay and Delaware Canal, Del. and Md	5-19-38
Chester River, $Md_{}$	46
Chicago Harbor and River, Ill	94
Channels in waters connecting Great Lakes	93
Chinoteague Inlet and Bay, Va	
Chipola River, FlaChocolate Bayou, Tex	
Choctawhatchee River, Fla. and Ala	
Choptank River, Md	46
Claiborne Harbor, Md	46
Clatskanie River, Oreg	101
Clear Creek, Tex	
Clearwater Harbor, Fla	
Cleveland Harbor, Ohio	
Clinton River, Mich Club Creek, Ga	
Cohansey River, N. J.	
Cold Spring Inlet, N. J.	
Coldwater River, Miss	80
Columbia River, Oreg. and Wash.:	
Cascades Canal	
Celilo Falls to Snake River, including tributaries, improvement from	
Celilo Falls to The Dalles Rapids	
MouthVancouver, Wash., to Willamette River	105 101
Wenatchee, Wash., to Winamette RiverWenatchee, Wash., to Bridgeport	101
Compton Creek, N. J.	
Conecuh River, Ala	71.
Congaree River, S. C.	

,	Page.
Conneaut Harbor, Ohio	89
Connecticut River, Mass. and Conn	22
Consolidation of items	
Contentnia Creek, N. C.	57
Cooper River (Creek), N. J.	33
Coosa River, Ga. and Ala	$\begin{array}{c} 76 \\ 101 \end{array}$
Coos Bay Harbor and River, OregCoquille River, Oreg	101
Core Sound, N. C., improvement of waterway to Beaufort Harbor	57
Corney Bayou, La	87
Corpus Christi Bay and Harbor, Tex. (waterway Galveston to Corpus	0.
Christi)	86
Corsica River, Md	46
Cowhead River, Ga	62
Cowlitz River, Wash	101
Crescent City Harbor, Cal	115
Crisfield Harbor, Md	46
Crystal River, Fla-	70
Cumberland River, Ky. and Tenn	
Current River, Ark. and Mo	88
Cuyahoga River, Cleveland, Ohio	89
Cypress Bayou, Tex. and La	85
D.	
D_{\bullet}	
Dalles-Celilo Canal, Oreg. and Wash	101
D'Arbonne Bayou, La	87
Darien Harbor, Ga	62
Deal Island, Md., improvement of lower thoroughfare at Wenona	46
Débris, mine, in California	57
Deep Bay, N. C., improvement of waterways to Swan Quarter Bay	. 57
Delaware Bay and River, N. J., Pa., and Del.:	94 40
Improvement of river, Philadelphia to the sea	34, 42
Lewes, Del., iron pier near Lewes	$\frac{36}{84}$
Des Cannes Bayou, La	93
Dickinson Bayou, Tex.	86 86
Dog River, Miss	77
Dorchester Bay, Mass	20
Double Bayou, Tex	86
Duck Island Harbor, Conn	21
Duluth Minn .	
Channels in waters connecting Great Lakes	93
Duluth-Superior Harbor, Minn	92
Dunns Creek and Crescent Lake, Fla	69
E.	
East Bay Bayou, Tex	86
East Pearl River, Miss	80
East River, N. Y	$28.\ 117$
Echo Bay Harbor, New Rochelle, N. Y. 4, 15,	19, 23
Elizabeth River, N. J.	31
Elk River, Md	46
Escambia River, Fla	71
Estherville-Minim Creek Canal, S. CEestimates of appropriations required	60
Eestimates of appropriations required	2, 124
TO.	
F.	
Fairport Harbor, Ohio	89
Fancy Bluff Creek, Ga	62
Feather River, Cal	101
Fishing Creek, N. C.	57
Fivemile River Harbor, Conn	$\frac{21}{21}$
Flint River, Ga	71
Frankfort Harbor, Mich.	93
Freeport Harbor, Tex	87

G.

	Page
Galveston Bay and Harbor, Tex	86
Improvement of waterway to HoustonWaterway to Corpus Christi	· 86
Gasconade River, Mo	96
Gloucester Harbor, MassL	20
Grand Haven Harbor, Mich	98
Grand Marais, Mich	92
Grand River, La	82
Grand River, Mich	98
Grays Harbor, WashGrays River, Wash	101
Great Lakes, channels in waters connecting	101 93
Great Peedee River, S. C.	60
Great Sodus Bay, N. Y	22
Green Bay Harbor, Wis	94
Greenwich Harbor, Conn	21
Grossetete Bayou, La	82
Grouping of itemsGulfport Harbor, Miss	6, 124
Gunport Harbor, Miss	00
H.	
Harbor Beach, Mich.; improvements of harbor of refuge	93
Harlem River, N. YHillsboro Bay and River, Fla	25 68
Hilo Harbor, Hawaii	102
Holland Harbor, Mich	
Holmes River, Fla	71
Honolulu, Hawaii	102
Hogulam River, Wash	101
Housatonic River, Wash	21
Houston to Galveston ship channel, Tex	86 26
Humboldt'Bay and Harbor, Cal	101
Huron Harbor, Ohio	89
ı.	
Illinois River, Ill	94
Indiana Harbor, Ind	94
Indian River, Fla	67
J.	
Jacksonville, Fla., waterway to Beaufort	57
James River, Va	54
Johnsons Bayou, La	85 80
Joi doil Tilver, Miss	30
K.	
Kahuliu Harbor, Hawaii	102
Kalamazoo River, Mich.	93
Kenosha Harbor, Wis	94
Kewaunee Harbor, Wis	94
Keweenaw Canal, across Keweenaw Point, Mich. (Keweenaw Bay-Lake	00
Superior waterway)	92
Key West Harbor, N. JKey West Harbor, Fla	31 67
Kissimmee River, Fla	- 70
L.	00
Lafourche Bayou, LaLake of the Woods, Minn	82 94
Lake Pontchartrain, La	83
Lakes, Great, channels in waters connecting	93

INDEX.

,	
Lake Washington Canal, Wash	
L'Anguille River, Ark	
La Trappe, Md	
Lee Slough, Apalachicola River, Fla	
Leipsic River, DelLewis River, Wash	
Little Elk River, Md	
Little Peede River, S. C.	
Little River, Del	
Little Sodus Bay, N. Y	
Lorain Harbor, Ohio	
Los Angeles, Cal	13, 100,
Lower Chipola River, Fla	
Lower Thoroughfare, Wenona, Deal Island, Md	
Ludington Harrbor, Mich	-
М.	
Mackinac Harbor, Mich	
Macon Bayou, LaMalden River, Mass	
Manaroneck Harbor, N. Y	
Manatee River, Fla	
Manchae Pass, La	
Manistee Harbor and River, Mich	
Manistique Harbor, Mich	
Manitowoc Harbor, Wis	
Manokin River, Md	
Manteo Bay, N. C	
Mantua Creek, N. J	
Mare Island Strait, Cal	
Marquette Bay and Harbor, Mich	
Mattawan Creek, N. J	
Maurice River, N. J	
Meherrin River, N. C.	
Menominee Harbor and River, Mich. and Wis	
Menominee River, Wis	
Mermentau River, La	
Improvement of waterway to Sabine River	
Merrimack River, Mass	
Miami Harbor, Fla	
Michigan City Harbor, Ind	
Milford Harbor, ConnMilford Haven Harbor, VaMilford Haven Harbor, Va	
Milwaukee, Wis	
Minim Creek-Estherville Canal, S. C.	
Minnesota River, Minn	
Mispillion River, Del	
Mississippi River:	
Brainerd to Grand Rapids, Minn	
Head of Passes to Cubits Gap, dredging shoals	
Head of Passes to Ohio River	
Leech River	
Missouri River to Minneapolis, Minn	
Ohio River to Missouri River	
Reservoir dams at headwatersSt. Paul, Minn., to Minneapolis	
South Pass	
South TassSouthwest Pass, Mississippi River	
Mississippi Sound, Miss. and Ala.:	
Waterway to Sabine River	
Horn Island Pass, Miss	
Missouri River	(
Mobile Bay and Harbor, Ala	105.
Improvement of harborImprovement of channel to Mississippi Sound	
Improvement of channel to Mississippi Sound	

	Page.
Mokelumne River, Cal	101
Monroe Harbor, Mich	101
Montonov Harbon Cal	93
Monterey Harbor, Cal	101
Morehead City Harbor, N. C	 57
Mormon Channel, San Joaquin River, Cal	101
Murderkill River, Del	36
Muskegon Harbor and River, Mich	93
Mystic River, Conn	99
Mustic Divon Maga	21
Mystic River, Mass	20
	·
N.	
None Diner Col	
Napa River, Cal	101
Narrows of Lake Champlain, N. Y. and Vt	22
Natalbany River, La	83
Nehalem Bar and Bay, Oreg	101
Neuse River, N. C	101
Nowhummont Honbon Maga	57
Newburyport Harbor, Mass	20
New Haven Harbor, Conn	21
New Jersey, canal across State of	41
New London, Conn	21
Newport News, Va., improvement of channel to	52
Now Biver N C	52
New River, N. C	57
New York Bay and Harbor, N. Y	24, 42, 154
Nezpique Bayou, La	84
Nome Harpor and mouth of Snake River, Alaska	102
Nomini Creek, Va	52
Norfolk Harbor, Va	15 10 00 104
Table 1 Table	15, 19, 22, 104
Improvement of waterway to Beaufort Inlet	55
Northeast River, N. C	59
Norwalk Harbor, Conn	21
0.	
	100
Oak Bay to Port Townsend Bay, Wash., waterway	
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, Cal	101
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, Va	101 52
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, Ga	101 52 62
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, GaOconee River, Ga	101 52 62 62
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, GaOconee River, GaOconto Harbor, Wis	
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, GaOconee River, GaOconto Harbor, WisOgdensburg Harbor, N. Y	
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, GaOconee River, GaOconto Harbor, WisOgdensburg Harbor, N. Y	
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, GaOconee River, GaOconto Harbor, WisOgdensburg Harbor, N. YOhio River	
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, GaOconee River, GaOconto Harbor, WisOgdensburg Harbor, N. YOhio RiverOklawaha River, FlaOklawaha River, FlaOaklawaha River, Fla	
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, GaOconee River, GaOconto Harbor, WisOgdensburg Harbor, N. YOhio RiverOklawaha River, FlaOlcott Harbor, N. YOlcott Harbor, N. YOlcott Harbor, N. YOlcott Harbor, N. Y	
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, GaOconee River, GaOconto Harbor, WisOgdensburg Harbor, N. YOhio RiverOklawaha River, FlaOlcott Harbor, N. YOldmans Creek, N. J	
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, GaOconee River, GaOconto Harbor, WisOgdensburg Harbor, N. YOhio RiverOklawaha River, FlaOlcott Harbor, N. YOlcott Harbor, N. YOlcott Harbor, N. YOlcott Harbor, N. Y	
Oak Bay to Port Townsend Bay, Wash., waterwayOakland Harbor, CalOccoquan Creek, VaOcmulgee River, GaOconee River, GaOconto Harbor, WisOgdensburg Harbor, N. YOhio RiverOklawaha River, FlaOlcott Harbor, N. YOldmans Creek, N. JOldmans Creek, N. J	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich	101
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olyinpia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y	101 52 62 62 94 22, 155 17, 18, 90 22 33 102 92 70 96
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark, and La	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark, and La	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olyinpia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olyinpia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P.	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Fla Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico River, N. C	101 52 62 62 94 22, 155 17, 18, 90 22 33 102 70 92 87 86
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico River, N. C Pamlico Sound, N. C., waterway to Beaufort Inlet	101 52 62 62 94 22, 155 17, 18, 90 22 33 102 92 70 96 22 87 86
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Oldmans Creek, N. J Olyinpia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico River, N. C Pamlico Sound, N. C., waterway to Beaufort Inlet Pamunkey River, Va	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olyinpia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico River, N. C Pamlico Sound, N. C, waterway to Beaufort Inlet Pamunkey River, Va Pascagoula Harbor and River, Miss	101 52 62 62 94 22, 155 17, 18, 90 22 33 102 70 92 87 86 54 57 57 77, 80
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico Sound, N. C., waterway to Beaufort Inlet Pamunkey River, Va Pass Cavallo, Tex., improvement of channel to Port Lavaca	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico River, N. C Pamlico Sound, N. C., waterway to Beaufort Inlet Pamunkey River, Va Pascagoula Harbor and River, Miss Pass Cavallo, Tex., improvement of channel to Port Lavaca Pawatuck River, R. I. and Conn	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico River, N. C Pamlico Sound, N. C., waterway to Beaufort Inlet Pamunkey River, Va Pascagoula Harbor and River, Miss Pass Cavallo, Tex., improvement of channel to Port Lavaca Pawatuck River, R. I. and Conn	
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico River, Va Pamukey River, Va Pascagoula Harbor and River, Miss Pass Cavallo, Tex., improvement of channel to Port Lavaca Pawcatuck River, R. I. and Conn Pearl River, Miss	101 52 62 62 94 22, 155 17, 18, 90 22 33 102 92 70 96 22 87 86 54 57 57 57 58 77, 80 86
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Oldmans Creek, N. J Olyinpia Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico River, N. C Pamlico Sound, N. C, waterway to Beaufort Inlet Pamunkey River, Va Pascagoula Harbor and River, Miss Pass Cavallo, Tex., improvement of channel to Port Lavaca Pawcatuck River, R. I. and Conn Peerl River, Miss Peekskill Harbor, N. Y	101 52 62 62 94 22, 155 17, 18, 90 22 33 102 70 92 87 86 54 77, 80 86 86 86 81 80 24
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Olympia Harbor, Wash Ontonagon Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico Sound, N. C., waterway to Beaufort Inlet Pamunkey River, Va Pascagoula Harbor and River, Miss Pass Cavallo, Tex., improvement of channel to Port Lavaca Pawcatuck River, Miss Peekskill Harbor, N. Y Pensacola Bay and Harbor, Fla	101 52 62 62 94 22, 155 17, 18, 90 22 33 102 70 92 87 86 54 57 57 57 57 57 88 21 80 24 71
Oak Bay to Port Townsend Bay, Wash., waterway Oakland Harbor, Cal Occoquan Creek, Va Ocmulgee River, Ga Oconee River, Ga Oconto Harbor, Wis Ogdensburg Harbor, N. Y Ohio River Oklawaha River, Fla Olcott Harbor, N. Y Oldmans Creek, N. J Oldmans Creek, N. J Olyinpia Harbor and River, Mich Orange River, Fla Osage River, Mo Oswego Harbor, N. Y Ouachita River, Ark. and La Oyster Creek, Tex., improvement P. Pagan River, Va Pamlico River, N. C Pamlico Sound, N. C, waterway to Beaufort Inlet Pamunkey River, Va Pascagoula Harbor and River, Miss Pass Cavallo, Tex., improvement of channel to Port Lavaca Pawcatuck River, R. I. and Conn Peerl River, Miss Peekskill Harbor, N. Y	101 52 62 62 94 22, 155 17, 18, 90 22 33 102 70 92 87 86 54 57 57 57 57 57 88 21 80 24 71

167

Page
Pittsburgh, Pa33
Plantation Creek, Ga62
Plaquemine Bayou, La82
Plaquemine Brulé Bayou, La84
Plattsburg Harbor, N. Y
Plymouth Harbor, Mass
Pocomoke River, Md
Ponchatoula River, La., improvement of Tickfaw River83
Pontchartrain Lake, La83, 100 Portage Lake, Manistee County, Mich., harbor of refuge93
Port Aransas, Tex86
Port Arthur Canal, Tex85
Port Bolivar, Tex86
Port Chester Harbor, N. Y23, 155
Port Clinton Harbor, Ohio89
Port Henry Harbor, N. Y. 22
Portland Harbor, Me
Port Lavaca, Tex., improvement of channel to Pass Cavallo 86
Port Townsend Bay to Oak Bay, Wash., waterway
Port Washington Harbor, Wis94
Port Wing Harbor, Wis
Potomac River, improvement at Washington, D. C
Provincetown Harbor, Mass
Pultneyville Harbor, N. Y
Turney life Harbor, 1. I
Q.
Queenstown Harbor, Md46
Queue de Tortue Bayou, La84
R.
Raccoon Creek, N. J. 33
Racine Harbor, Wis94
Rappahannock River, Va58
Raritan Bay and River, N. J
Red River, La., Ark., Tex., and Okla 85, 87
Red River of the North, Minn. and N. Dak
Redwood City Harbor, Cal 10 Redwood Creek, Cal 101
Rehoboth Bay, Del., waterway to Delaware Bay 37
Richmond Harbor, Cal
Roanoke River, N. C55
Rockhall Harbor, Md 46
Rogers City Harbor, Mich
Rondout Harbor, N. Y
Rouge River, Mich
S.
Sabine-Neches Canal 85
Sahina River Tex:
Improvement of Sabine Pass Harbor 85
Waterway to Mississippi River82
Waterway to Mermentau River, La
Sacramento and Feather Rivers 19-101
Saginaw River, Mich93 St. Andrews Bay, Fla.:
Improvement of bay 71
Improvement of channel to Apalachicola River
St. Clair Flats Canal, Lake, and River, Mich., improvement of channels in
waters connecting the Great Lakes93
St. Croix River, Wis. and Minn94
St. Francis River, Ark. and Mo88
St. Johns River, Fla.:
Between Jacksonville and Palatka, including Orange Mills Flats 69
Between Palatka and Lake Harney 69
Jacksonville to the ocean69
Waterway to St. Johns River61

Cu Turan Di an Dul
St. Jones River, Del
St. Josephs Bay, Fla., improvement of entrance
St. Joseph Harbor and River, Mich
St. Lucie Inlet, FlaSt. Marys River and St. Marys Falls Canal, Mich., channels in waters
St. Marys River and St. Marys Falls Canal, Mich., channels in waters
connecting the Great Lakes
St. Marys River, Ga. and Fla-
St. Petersburg Harbor, Fla-
Salem Harbor, Mass
Salem River, N. J
Saline River, Ark
San Diego Harbor, Cal 13-15, 100-104, 1
Sandusky Harbor, Ohio
San Francisco Bay and Harbor, Cal
San Joaquin River, Cal
San Juan Harbor, P. R.
San Luis Obispo Harbor, Cal
San Pablo Bay, Cal
Santa Rosa Sound, Fla., improvement of The Narrows
Santee River, S. C.
Sapelo Bar and Harbor, Ga
Sarasota Bay, Fla
Satilla River, Ga
Saugatuck Harbor, Mich., improvement
Saugatuck River, Conn
Saugerties Harbor, N. Y
Savannah Harbor and River, Ga
Schuylkill River, Pa
Scuppernong River, N. C.
Section 2
Section 3
Section 4 1
Section 5 1
Section 6 1
Section 7 1
Section 8 1
Section 9 1
Section 10 1
Section 11 1
Section 12 1
Section 13 1
Sheboygan Harbor, Wis
Ship Island Harbor and Pass, Miss., improvement of pass and channel
to Gulfport
Shoal Harbor, N. J
Shrewsbury River, N. J
Siuslaw River, Oreg 1
Skagit River, Wash 102, 1
Slaughter Creek, Md
Smiths Creek, N. C.
Smyrna River, Del
Snake River, Idaho, Oreg., and Wash1
Snohomish River, Wash 1
South Haven Harbor, Mich
Southport Harbor, Conn
South River, N. C
South River, N. J
Stamford Harbor, Conn
Steele Bayou, Miss
Stockton Channel, San Joaquin River, Cal1
Stonington Harbor, Conn
Sturgeon Bay and Lake Michigan Canal, Wis
Suisun Creek or Channel, Cal1
Sulphur River, Ark, and Tex
Sulphur River, Ark. and TexSunflower River, Miss., improvement of Big Sunflower River

	Pag
Suwannee River, Fla	7
Swan Quarter Bay to Deep Bay, N. C., improvement of waterway	5
Swift Creek, N. C	5
Swinomish Slough, Wash	10
т.	
Tacoma Harbor, Wash	10
Tallahatchie River, Miss	8
Tampa Bay and Harbor, FlaTar River, N. C	$\frac{6}{5}$
Tarrytown Harbor, N. Y	$\frac{3}{2}$
Tchula Lake, Miss	8
Teche Bayou, La	8
Tennessee River	. 8
Tensas River, La	8
Terrebonne Bayou, La	8
Texas City Harbor, Tex	8
Thames River, Conn	2
Thoroughfare Bay, N. C.	5
Tickfaw River, La., improvement of, including tributaries	8
Tilghman Island Harbor, MdTillamook Bay and Bar, Oreg	$\frac{4}{10}$
Toledo Harbor, Ohio	8
Tombigbee River, Ala. and Miss	7
Toms River, N. J	3
Tonawanda Harbor, N. Y	2
Traverse Lake, Minn. and S. Dak.	9
Tred Avon River, Md	4
Trent River, N. C.	5
Trinity River, Tex	8
Tuckerton Creek, N. J.	
Twitch Cove and Big Thoroughfare River, Md	8
Two Rivers Harbor, Wis	$\frac{4}{9}$
Tyaskin (Wetipquin) Creek, Md	4
, , , , , , , , , , , , , , , , , , , ,	
Ü.	
Upper Chipola River, Fla	7
Upper Machodoc Creek, Va	5
Urbana Creek, Va	5
V.	
Vermilion Bayou, La., improvement of channel, bay, and passes	8
Vermilion Harbor, Ohio, improvement	8
verminon frattori, omo, improvement	0
· W.	
Waccamaw River, N. C. and S. C	6
Wappinger Creek, N. Y.	$\frac{0}{2}$
Warroad Harbor and River, Minn	$\tilde{9}$
Warwick River, Md	4
Washington Bayou and Lake, Miss	8
Washington Lake, Wash	10
Wateree River, S. C.	6
Water hyacinths, removal of:	_
From Florida waters	7
From Mississippi weters	8
From Mississippi watersFrom Texas waters	8 8
Waterways—Norfolk, Va., to Beaufort Inlet, N. C	5 5
Waukegan Harbor, III	$\frac{5}{9}$
Westchester Creek, N. Y	2
Westport Harbor, Conn	$\bar{2}$
Weymouth River, Mass	2
White Lake Harbor, Mich	9
White River Ark	C

INDEX.

•	
Wicomico River, Md	
Willemotte Piver Oreg	
Willana Harbor and River, Wash	
Wilmington Harbor, Del	
Winyah Bay, S. C	
Winyah Bay, S. CWithlacooche River, Fla	
Wolf River Miss, improvement	
Woodbridge Creek N. I	
Woodbury Creek, N. J.	
Υ.	
;	
Yamhill River, Oreg	
Yaquina Bar, Bay, and Harbor, Oreg	
Yaquina River, Oreg	
Yazoo River, Miss	
Z.	
Zippel Bay, Minn	















